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NEEDS OF FAMILY MEMBERS OF ICU PATIENTS AS PERCEIVED BY FAMILY MEMBERS AND ICU NURSES: AN EXPLORATORY STUDY

by

© MARGARET DORIS PROWSE

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SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled NEEDS OF FAMILY MEMBERS OF ICU PATIENTS AS PERCEIVED BY FAMILY MEMBERS AND ICU NURSES: AN EXPLORATORY STUDY submitted by MARGARET DORIS PROWSE in partial fulfilment of the requirements for the degree of Master of Nursing.

Marilyn Manson
.....
Supervisor

Helen Simonds
.....

Kyung Bae
.....

Date March 31/83
.....

To My Parents,

for their guidance, encouragement and love.

ABSTRACT

This study was conducted 1) to determine the relative importance of selected needs of family members as they are perceived by family members and ICU nurses; 2) to determine whether these needs are being met according to family members and ICU nurses; and 3) to determine the extent of agreement between family members' and nurses' perceptions regarding nursing's responsibility to meet family members' needs.

Respondents were 40 family members and 31 nurses from the intensive care unit of a large metropolitan teaching hospital. Data were collected from family members following the patient's transfer out of the intensive care unit, using a questionnaire consisting of need items representative of those commonly experienced by family members. Data were analyzed using frequencies and cross-tabulations, Kendall's Tau, and factor analysis.

Results revealed that the needs considered most important by family members related to receiving honest, understandable information about the patient's treatment and prognosis, and knowing that hospital personnel cared about the patient. It appeared that for the majority of family members, these needs had been met.

Responses from nurses demonstrated a general agreement with family members regarding the importance of needs. However, there was disagreement regarding the responsibility of nursing to meet some of the family members' needs. In contrast to the ICU nurses, family members did not feel it was a responsibility of nursing to meet the need to discuss their feelings, or to be concerned about their health.

Factor analysis identified five components of family members' needs; needs related to information about the patient's treatment and prognosis; needs related to supportive people; needs regarding patient visiting; needs regarding information about the intensive care environment; and needs pertaining to the physical surroundings in the hospital.

Additional research is recommended to determine the reliability and validity of the results and explore further the role of nursing and nurses in meeting the needs of family members of ICU patients.

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CHAPTER I

INTRODUCTION

> The essence of man is in the experience of his relation to other human beings and to the cosmos (Dubos, 1968, p. 115).

Background to the Problem

It has long been recognized that the individual cannot be completely understood in isolation from his family and other social networks of which he is an integral part. According to Ackerman (1958), "None of us lives his life alone. While some aspects of life experience are, to be sure, more individual than social and others more social than individual, life is nonetheless a shared and a sharing experience." (p. 15).

The critical illness of a patient is not an isolated event, but rather has an appreciable impact on those who play an important role in the patient's life. The members of one's family influence and are influenced by the patient's illness (Pinneo, 1979; Gillis, 1981). Indeed, hospitalization for acute serious illness is frequently viewed as constituting a crisis situation for the family (Brose, 1973; Caplan, 1964; Rapaport, 1962; Speedling, 1980).

Although families have a tremendous influence upon patient's immediate and long term recovery (Anthony, 1970; Beaudry, 1968; New, 1968; Tolsdorf, 1976; Williams & Rice, 1977), the focus of care in our present health care system remains on the individual (Forsyth, 1982). Wilson (as quoted in Beckingham, 1976), bears out this observation in the following statement:

> Families are extraneous to the power structure of the hospital which is conceived of as fully capable of curing the individual without his relatives. The patient is amputated from his family for precise diagnosis and care. In the creative process of recovery, relatives are spectators, receivers of good news or bad news, until the day of discharge when quite suddenly the patient is theirs again (p. 25).

Within the intensive care unit (ICU), the first priority of attention is necessarily the patient who is in a physiological crisis. However, the patient's family members frequently remain on the periphery and little attention is given to their needs (Gardner & Stewart, 1978; Holub, Eklund & Keenan, 1975). Speedling (1980) asserts, "There remains a paradox of superhuman efforts for the patient on the one hand, and on the other, neglect of his primary support system for maintaining in the present and the future, the heroic achievements of ICU care " (p. 20).

The fear and anxiety exhibited by family members of patients in intensive care units have been acknowledged by numerous authors (Doerr & Jones, 1979; Epperson, 1977; Potter, 1979; Williams & Rice, 1977; Wilson, 1975). In addition to the stress of the potential loss of the patient through death, the intensive care environment, by virtue of its specialized equipment, is often seen as a foreign and threatening milieu (Potter, 1979). Heightening the family members' anxiety are the long hours spent in waiting rooms between visits to the patient.

The concept of comprehensive critical care encompasses not only the care of the patient but also the supportive care of the family (Roberts, 1976; Simon & Poelker, 1980). Nurse-family inter-

actions occur during the family members' visits and it is often difficult in these brief contacts to evaluate each family's situation (Gardner & Stewart, 1978). Thus, interventions are often based on commonly experienced needs of family members as they are perceived by the staff (Molter, 1976). If the overall focus of importance of family members' needs is not congruent between family members and ICU staff, counterproductive interventions could logically result.

Need for the Study

Research on family members' needs has recently been undertaken by several investigators (Blichfeldt, 1979; Brew & Dracup, 1978; Gillis, 1981; Molter, 1976, 1979; Rasie, 1980). However, to the knowledge of this investigator, there have been no studies which have compared family members' and ICU nurses' perceptions of family members' needs. In this regard, the present study is unique. The exploration of this relationship may identify gaps and incongruencies between the perceptions of needs by family members and ICU nurses, the knowledge of which would be useful in planning future interventions to assist families in coping with the critical illness of a family member.

Objectives of the Study

The overall objective in this study was to determine the relative importance of selected needs of family members of ICU patients as perceived by family members and ICU nurses. Specific research objectives were the following:

1) to determine the relative importance of selected needs of family members of ICU patients as perceived by family

members;

2) to determine whether or not, and by whom, family members perceive these needs are being met;

3) to determine the relative importance of selected needs of family members of ICU patients as perceived by ICU nurses;

4) to determine whether or not ICU nurses perceive these needs are generally met;

5) to determine the ways and the extent to which family members' perceptions of their needs differ from ICU nurses' perceptions of those needs;

6) to determine the extent to which family members' perceptions of nursing's responsibility to meet their needs differ from ICU nurses' perceptions of nursing's responsibility to meet these needs; and

7) to examine the utility of the medical model of crisis and Narayan and Joslin's model of crisis in interpreting the findings of this study.

Definition of Terms

The following are definitions of terms as they are used in this study.

NEED: A lack of something wanted or required by an individual.

ICU PATIENTS: Patients, eighteen years of age or older, who have spent between three and thirty days in the intensive care unit following unanticipated admission resulting from trauma or other medical and/or surgical problems.

FAMILY MEMBERS: Persons, eighteen years of age or older, related to the patient or living with the patient and who visited the patient three or more times while the patient was in the intensive care unit.

ICU NURSES: Registered nurses who are nursing full time or part-time in an area of the hospital providing specialized facilities and monitoring equipment for patients requiring continuous observation and intervention.

Assumptions and Limitations

The major assumption often underlying studies on families of ICU patients is that serious illness resulting in admission to an ICU creates a crisis situation for family members such that the usual patterns of coping are inadequate for adaptive behavior and external intervention is required before further adjustment can take place. While it may be argued that not all family members are in a state of crisis as it is defined above, it is assumed in this study that family members are in a crisis state by virtue of the uncertainty of the patient's prognosis and their unfamiliarity with the intensive care environment which makes intervention by health professionals essential.

The research instrument used in this study was derived from an instrument developed by Molter (1976, 1979). Content validity was established in Molter's study and factor analysis was carried out in the present study as an indicator of construct validity. Attempts to establish reliability of the instrument were not undertaken in the present study.

The sample of family members was drawn from a population of family members whose relative/housemate was in the recuperative stage of illness following transfer from the intensive care unit. Additional limitations of this study include the relatively small sample sizes and the convenience sampling technique used. Results are thus not generalizable beyond the study population. The findings of this investigation are considered in light of these stated assumptions and limitations.

Overview of the Thesis

In this introductory chapter the problem and need for the study, the study objectives, definition of terms, assumptions and limitations have been stated. Chapter II outlines crisis frameworks as they have been applied to family members of ICU patients. In Chapter III, other literature relevant to this investigation is reviewed. Chapter IV contains a detailed description of the research design and methodology and in Chapter V the findings are presented and discussed. In the final chapter, a summary of the study is given and recommendations for further research arising from this investigation are made.

CHAPTER II

THEORETICAL FRAMEWORK

Several theoretical frameworks are considered relevant to the present topic. However, no single framework was found which would adequately provide a basis for interpreting the needs experienced by family members of patients in intensive care units. In this chapter, an overview of the medical model of crisis (Caplan, 1964; Parad, 1965; Rapaport, 1962; and others) and a nursing model of crisis (Narayan & Joslin, 1980) is given with particular reference to their application to ICU patients' families.

In previous studies related to needs of family members of patients in ICU (Breu & Dracup, 1978; Dracup & Breu, 1978; Gillis, 1981; Molter, 1976, 1979), various frameworks have been used. As Breu and Dracup (1978; Dracup & Breu, 1978) dealt exclusively with spouses of coronary care unit patients having extremely grave prognoses, the framework of anticipatory grief (Lindemann, 1944) was utilized in those two studies. Gillis (1981) developed a conceptual model for her study of family members' needs during the critical illness of a relative. However, limitations of that model became apparent at the interpretation stage in that the needs outlined in her model were not sufficiently discriminant and difficulties arose in her attempts to categorize the needs experienced by family members. Gillis concluded that several modifications in the model were necessary. Williamson (1978) draws attention to both the conceptual and methodological problems inherent in exploring the concept of "needs". The most problematic of these is the interaction between physical

and emotional components of needs thus influencing the reliability of need categories.

Molter (1976, 1979) incorporated both a medical model of crisis (Caplan, 1964; Parad, 1965; Rapaport, 1962; and others) and a psychological model, Maslow's hierarchy of needs (1970), in her study of relatives' needs during critical illness. In both Molter's (1976, 1979) and Gillis' (1981) studies the underlying assumption was that critical illness with subsequent admission to an intensive care unit disrupts the usual functioning of the family members such that previously learned patterns of coping are inadequate for adaptive behavior and a crisis often results for the family members.

Although it may be argued that all family members are not necessarily in a "crisis", a crisis framework would seem to be at the present time the best model to utilize in attempting to interpret the needs experienced by family members of ICU patients. For this reason, a medical model of crisis (Caplan, 1964; Parad, 1965; Rapaport, 1962; and others) as well as a nursing model of crisis (Narayan & Joslin, 1980) were selected to be used in this study and are described below.

Medical Model of Crisis

Numerous writers, including Lindemann (1944), Caplan (1964), Parad (1965) and Rapaport (1962) have contributed to the development of crisis theory based upon the physiological principle of homeostasis applied to psychological functioning. Homeostasis is defined by the need to preserve stable chemical or electrolyte balances within the

body to sustain life. When these balances are upset, self-regulatory mechanisms are triggered that help to return these balances to healthy levels for the individual. According to the medical model crisis theorists there also exists a relatively consistent balance between cognitive and affective experience for each individual. The primary characteristic of this balance is its stability for that particular individual, a stability which becomes a frame of reference against which to evaluate changes in psychological functioning.

In every day life, experiences are encountered in which homeostatic equilibrium is disrupted and a negative effect results. Caplan (1964) defines these experiences as "emotionally hazardous situations". The rise in stress resulting from emotionally hazardous situations motivates the individual to use coping mechanisms and problem-solving behaviors that help him to reestablish homeostatic balance. Coping mechanisms, which encompass a wide range of behaviors, are defined here as:

> Those maneuvers used by individuals to reduce, to control, or to avoid unpleasant emotions in order to reestablish a state of homeostatic balance and facilitate return to normal functioning for that person (Baldwin, 1981, p. 25).

According to this theory, when an individual experiences an emotionally hazardous situation and if he is unable to effectively utilize previously learned coping behaviors, then an emotional crisis is likely to ensue. In Caplan's words, an emotional crisis is evoked when the "usual homeostatic, direct problem-solving mechanisms do not work, and the problem is such that other methods which might be used

to sidestep it also cannot be used" (p. 39).

Further to this overview of the medical model of crisis, there are a number of corollaries to crisis theory which are summarized by Burgess and Baldwin (1981) and which are helpful in understanding the emotional crisis of family members during the critical illness of a patient. These basic corollaries are the following:

1) Because each individual has a specific tolerance for stress, emotional crises have no direct relationship per se to psychopathology and may occur among the well-adjusted.
2) Emotional crises are self-limiting events in which crisis resolution, either adaptive or maladaptive, takes place within an average period of four to six weeks.
3) During a crisis state, the individual has enhanced capacity for cognitive and affective learning because of the vulnerability of this state and the motivation produced by emotional disequilibrium.
4) Adaptive crisis resolution is frequently a vehicle for resolving underlying conflicts which have in part determined the emotional crisis.
5) A small external influence during a crisis state can produce disproportionate changes in a short period of time when compared to therapeutic changes which occur during non-crisis states.
6) Resolution of emotional crises is not necessarily determined by previous experience or character structure but rather is shaped by sociopsychological influences operating in the present.

7) Inherent in every emotional crisis is an actual or anticipated loss to the individual which must be reconciled as part of the crisis resolution process.
8) Every emotional crisis is an interpersonal event involving at least one significant other person who is represented in the crisis situation directly, indirectly, or symbolically.
9) Effective crisis resolution decreases the likelihood of future crises of a similar nature by increasing the individual's repertoire of available coping skills which can be used in such situations (Burgess & Baldwin, 1981, pp. 29-33).

The limitations of using a medical model to understand the concept of crisis have been outlined in the literature (Smith, 1978; Taplin, 1971). Narayan and Joslin (1980) proposed a nursing model of crisis which emphasizes the potential growth enhancement that crisis offers rather than the pathogenic quality often associated with the traditional medical model of crisis. An overview of their model of crisis is given below.

A Nursing Model of Crisis

Narayan and Joslin (1980) view crisis in terms of health encompassed in the following points, which in this study are applied to the family members of ICU patients:

1) Health is more than the absence of disease or symptoms, and implies the unity of all aspects of the individual: mind, body and spirit.
2) Humans are open systems and subsystems of other systems such as the family. Within this open system the individual continually

strives toward greater complexity, order and self-differentiation.

3) One's attitudes, values, perceptions and beliefs affect one's health and can lead to alterations in one's health status.

4) Optimal health requires the allocation of various resources or supplies from within and without the individual.

5) Health can be conceived as existing on a continuum with the maximum state of health on one end and death on the other.

6) The focus of health and healing exists within the individual although the nurse can act as a catalyst or facilitator.

7) States of health that are not optimal can be opportunities for growth and learning if adequately utilized by the individual.

With respect to the concept of health as outlined above, Narayan and Joslin (1980) define crisis as "a state of depleted health potential" (p. 37). This state occurs when there is an "alteration in the dynamic pattern of functioning whereby there is an inability to interact with internal and external forces as the result of a temporary or permanent loss of necessary resources" (Narayan & Joslin, 1980, p. 38). According to this model, throughout the life span an individual will encounter obstacles to his life goals. These obstacles may be in the form of precipitating events of a sudden, unexpected nature or those that are of gradual onset but occur during a period of developmental transition. The individual responds to the obstacle by utilizing past knowledge and coping strategies. His resources - both inner and outer sources of strength and support - are mobilized to provide assistance in the situation. If these attempts are inadequate the individual will begin to experience

increased anxiety and tension, and eventually, if the threat is not relieved or if the resources are insufficient to deal with the obstacle, disorganization and depletion of the individual's health will occur. At the peak of a crisis the individual is more sensitive to intervention or assistance (Aguilera & Messick, 1979; Caplan, 1964; Narayan & Joslin, 1980). In keeping with the notion that less than optimal health states can provide opportunities for growth and learning, one may view crisis as a potential turning point in the person's life.

Looking at the frameworks outlined above, one can see that there are differences in the basic premises regarding crisis and crisis resolution. While the traditional medical model of crisis focusses upon the individual's return to an equilibrium or "homeostasis", Narayan's and Joslin's model emphasizes the potential improvement in the individual's health state as a result of crisis. The question arises whether or not one can adequately utilize the crisis framework to understand the needs experienced by family members of ICU patients. If one defines crisis as it has been defined above, it could be argued that family members of ICU patients are not in a crisis. However, if one views crisis as a "state wherein an individual requires external intervention in order to effectively cope with the situation" (Simmons, 1982), then family members of ICU patients would be included in this definition. By virtue of their unfamiliarity with the intensive care unit and the patient's prognosis, family members rely on the intervention of health care workers to deal with the situation. Throughout this

study, crisis will be viewed as it has just been outlined above. The utility of each of the crisis frameworks outlined above will be examined in Chapter V in interpreting the findings of the present study.

CHAPTER III

REVIEW OF THE LITERATURE

The purposes in presenting this literature review are to provide a brief overview of what has been written on the impact of illness and hospitalization upon the family, nurse-family interaction in intensive care environments, interventions intended to support patients' family members, and the needs identified by family members of ICU patients.

Impact of Illness and Hospitalization Upon the Family

That illness or disability is a family matter, not just an individual affair, is supported by researchers and practitioners in the fields of nursing (Roberts, 1976; Simon & Poelker, 1980), rehabilitation (Bray, 1977; Weller & Miller, 1977), family crisis (Anthony, 1970; Caplan, 1964), medical sociology (Parsons & Fox, 1968) and mental health (Kaplan, Smith, Grobstein & Fischman, 1973; Olsen, 1970). Research on the effects of illness on the family has primarily focussed on three main areas: the family system, marital relationships, and the social situation of the family. Findings from these studies suggest that families experience personal, interpersonal, and extra-family difficulties during illness of a family member (Anthony, 1970; Malone, 1977). The impact of chronic illness and disability upon the family unit has been examined by numerous authors (Klein, Dean & Bogdonoff, 1967; Livsey, 1972; Maillick, 1979; Thompson, 1974, and others). However, until fairly recently, little attention has been paid to family

members of acutely ill patients.

The sudden incapacitation of a family member due to hospitalization can have a profound effect on the family and its members. Litman (1974) found that families experienced problems ranging from just "missing" the patient to severe disruptions in home activities and role alterations. Using the case study approach Berezowsky (1979) explored the reactions of families with dependent children to the occurrence of a sudden stroke in the working father. In the families studied, the father's illness led to a family crisis, which was defined as a situation wherein the family was forced to change its usual patterns of functioning in order to cope with its present situation.

Recently, several authors have drawn attention to the fear and anxiety exhibited by family members of acutely ill hospitalized patients (Doerr & Jones, 1979; Potter, 1979; Roberts, 1976; Simon & Poelker, 1980; Wilson, 1975). Skelton and Dominian (1973) explored the feelings, reactions and difficulties experienced by wives of first admission myocardial infarction patients. Findings in their study revealed that these spouses exhibited considerable distress due to the suddenness of the illness. They were left with a sense of loss due to the threat of death and had a tendency to feel guilty and blame themselves. In a more recent Canadian study, Samland (1980) interviewed 22 individuals who had significant others admitted to the emergency department, at 24 and 48 hours after admission, to determine their feelings about the situation and the background variables which influenced their response. High levels

of stress were present for all interviewed, and for 60 percent of these, the event was considered crisis-provoking. The findings also indicated that nurses were the most available resource for support but that they frequently did not accurately assess the subjects' perceptions of their concerns, feelings and behaviors as indicators of crisis states, and therefore may have responded ineffectively to support their needs.

Silva (1977), in interviews with 48 spouses of patients scheduled for major surgery, reported feelings of isolation, anxiety, timelessness and disruption in response to the impending surgery. These findings were also supported by Baudry and Wiener (1968) upon exploring relatives' response to impending surgery of a loved one. In each of these studies an open ended interview schedule was used.

The intensive care unit has been viewed by health professionals as a setting imposing increased stress upon family members (Jilling, 1980; Potter, 1979; Reichle, 1975). High noise levels, the presence of specialized equipment, the lack of clarity of explanations, short visitation periods, along with the patient's uncertain prognosis contribute to the heightened anxiety of family members. As compared to general wards, family members of ICU patients observe a greater number of medical emergencies and deaths among neighboring patients and spend long hours waiting between visits to the patient's bedside (Williams & Rice, 1977).

The above studies support the assertion that illness of a family member tends to disrupt the family's customary patterns of functioning. Sudden acute illness, particularly with subsequent

admission to an intensive care environment creates additional stress upon family members. It is in light of this that family members are considered to be in crisis requiring intervention on the part of health professionals.

Nurse-Family Interaction in the Intensive Care Unit

It is apparent within the literature that family members constitute an important part of the patient's environment during the patient's ICU stay and that the interaction among patient, family members and nurse can be either a positive or negative factor in this environment. The value of effective nurse-family interactions is expressed by Gardner and Stewart (1978): "appropriate interactions with family members may lead to decreased anxiety, increased reassurance, better cooperation, improved rapport, and better patient care" (p. 105). Others (Jillings, 1981; Rasie, 1980; Roberts, 1976) have also drawn attention to the importance of effective nurse-family interaction in the intensive care environment. The literature indicates that, unfortunately, ICU nurses have frequently regarded families of ICU patients as sources of stress, an unwelcome hindrance, or an inconvenience (Frost, 1970; Michaels, 1971; Portman, 1974). Michaels' (1971) study revealed that, while ICU nurses say that they recognize family members as important and they wish to help them, they also frequently believe family members should be kept out of the ICU and they "invent" reasons to avoid interacting with family members. Although Michaels attributes this attitude to stress upon ICU nurses, Rosenthal (1980) attempts to explain the nurses' hesitancy to interact with family members in terms of control. She suggests that nurses

struggle for control over the patient's situation and see the family as interfering with that control.

Konrad (1973) studied the communication which took place during the first visiting period after patients' emergency admission to an intensive care unit and noted the tremendous anxiety of the family members. Visitors typically paused at the nursing station and yet did not speak to the nursing staff. From her observations, the author concluded that this initial exposure to the ICU setting did not allay fears and anxiety for the family members. Gardner and Stewart (1978) suggest that following the initial contact with the family members of patients in intensive care units, the degree of staff-family involvement depends upon factors such as staff workload, availability of staff and family members, and staff attitudes regarding visitation. Other significant factors reported by the authors were age, race, mood, appearance and behaviors of both staff and family members. However, none of these variables were systematically examined by the authors.

Several authors have highlighted the problem of familial isolation which may occur in intensive care environments. Speedling (1980), in a six month observational study, noted communication between patients, family members, physicians and nurses in an intensive care unit. The investigator observed that the first thing which occurred upon entry into the intensive care unit was the separation of the patient from his family, and the assignment of individuals needing help to passive, dependent roles. It was observed that much of what families learned about the nature of the care the patient was

receiving was conveyed by inference. As visiting time was brief, family members' perceptions of their relative's condition and the ICU were based upon patient-family interactions which may not have been representative of the situation. Because the families' interventions were often based on an understanding of the situation which the patients did not necessarily share, the net effect was to create a barrier between patients and family, making visits a source of stress for both patients and family members. Other studies (Minkley et al., 1979; Simon & Poelker, 1980) have also reported that families may have a negative effect upon patients rather than a positive one when they are not included in the patients' care plan.

The communication which takes place among families and significant others of ICU patients has also been discussed within the literature. The nursing literature in particular is replete with anecdotal accounts of ICU waiting rooms depicting the helplessness and boredom experienced by families during the long waiting periods (Cooper, 1976; Higgins, 1976; Mitchell, 1976; and others). However, despite the abundance of such discussion, little empirical research has been undertaken in this area. Dickson (1975) observed interpersonal interaction of relatives of ICU patients in one hospital waiting room. Although the sample size was small and non-participant observation time was limited, it was found that a great deal of support was sought in the waiting room from the relatives of other patients. An additional finding in this study was that either the need for accurate information was not being met by hospital personnel during staff-family interactions, or the "correct" information was being perceived inaccurately by the relatives.

The above studies illustrate the importance of effective interaction between family members and staff in the intensive care unit and have suggested that interaction is often brief with the family members relying upon other visitors to support their feelings and concerns. It is within this hospital environment that special needs arise for family members and interventions should be directed towards meeting these needs.

Supportive Measures for Family Members

Supportive measures for family members which have been discussed within the literature include providing information and education, encouraging appropriate expression of feelings, improving physical aspects of the waiting environment and prescribing medications. The nursing literature on this topic centers on how nurses should talk to the families, why such communication is important, and the consequences for the patient if the family is not included in the care plan. Despite the abundance of much prescriptive writing, little empirical research has been done in this area.

Efforts to alleviate family members' anxiety through group intervention have been examined by a few authors. Holub, Eklund and Keenan (1975) explored the effects of regular family conferences as a way of meeting the needs of family members of coronary care patients. The main objective of the conferences was to provide a means by which information could be reinforced and corroborated. Family members indicated that they found the conferences helpful in relieving their anxiety and gain mutual support from other patients' relatives. These findings were also supported by Hoover (1979) who attempted to esta-

blish a program to meet the needs of relatives of patients with neurological injuries. Unfortunately, there are no data except the authors' opinions from either of the above studies to support the claim that such programs adequately identify and meet the needs of family members.

One area of support which has been more thoroughly addressed in the literature is the preparation of the family members for what they will see and hear in critical care. According to Wallace (1977), "there is a need to prepare relatives of patients in the intensive care unit beforehand for what they will encounter. As most people have never before set foot in such a specialized and mechanized area of the hospital, the equipment alone overwhelms them" (p. 33). Doerr and Jones (1979) examined the effect of preparation for visitation of twelve families on the state anxiety level of coronary patients and concluded that patients whose family members were prepared for the visitation showed a mean decrease of points on the state anxiety scale, while patients whose families were unprepared experienced a mean increase of state anxiety points.

Silva (1977) describes an orientation program she developed for spouses of patients undergoing surgery. It was found that spouses reported significantly less anxiety toward the surgery than those who were not given orientation information. The addition of a psychiatric nurse to the cardiac arrest team at one hospital is described by Ryan (1974). The role of the nurse in this situation was to remain with the family and be supportive of their feelings and concerns during the patient's medical crisis. Although various benefits of this program

were described by the author, the comprehensive effects of these kinds of programs are not established in the literature. As yet there remains limited empirical data to determine the extent to which supportive programs such as the ones cited above, identify and meet the needs of family members.

What do family members actually regard as supportive to them during the illness of a loved one? Some preliminary research toward answering this question has been undertaken. Freihofer and Felton (1976) gave a list of statements, each describing a nursing behavior, to 25 people who currently had a close family member or friend terminally ill in a hospital. These people were asked to rank the importance of the stated behaviors on a scale between 'helpful' and 'not helpful'. The behaviors identified as most important to the relatives and friends were the nurse's reassurance of the patient's physical comfort, and the nurse's openness to the family's expression of feelings. Although this study focussed upon the nurse's supportive behaviors as ranked by families and friends of terminally ill patients, one might expect some similarities to those behaviors identified by families and friends of patients who are acutely ill (e.g., support of the family's expression of feelings about the patient's situation). Irwin and Meier (1973) compared relatives' and health care professionals' perceptions of supportive measures used in working with relatives of oncology patients. The sample included 20 relatives and 20 health professionals. Using a Q-sort procedure, subjects rated the importance of honesty in dealing with the relatives, clear explanations, up-to-date information, patient

comfort, and interest in relatives' questions. Although relatively small samples were used, a comparison of the views of relatives and health care givers showed significant differences in how supportive behaviors were perceived. In a similar study Carey (1973) explored differences of views in relation to the value patients, nurses and physicians placed on having a chaplain available to patients at all times. Again, significant differences were found between health professionals and patients.

The above studies suggest that supportive measures are viewed differently by patients, family members and health professionals. In light of this, it may be suspected that differences may exist between the perceptions of family members' needs by family members and health professionals.

Needs of Family Members of ICU Patients

It is only recently that research on the needs of family members of ICU patients has appeared within the literature. One of the earliest studies in nursing which explored relatives' needs was undertaken by Hampe (1975) who interviewed spouses of 27 terminally ill patients. Eight personal needs were identified by these spouses. These included: the need to be with the dying person; to be helpful to the dying person; to be assured of the dying person's comfort; to be informed of the mate's condition and impending death; to ventilate emotions; to have support of other family members; and to have acceptance and support from health professionals.

Although spouses believed that nurses had been helpful to their dying mates, emotional support from nurses was not

expected by the spouses themselves. In a more recent study, Greenley (1981) described patients' and significant others' perceptions of their needs during terminal illness. Many of the needs identified in Hampe's study were expressed by the significant others in this study. As the focus in both these studies was upon relatives and friends of terminally ill oncology patients, the question might be raised as to whether different needs might exist for family members of acutely ill patients.

In a study addressing that question, Dracup and Breu (1977, 1978; Breu & Dracup, 1978) explored the needs of spouses of acutely ill patients in a coronary care unit. The needs identified by these spouses were: need for relief of initial anxiety, for information, for support and ventilation of feelings, to be with the patient, and to be helpful to the patient. The degree of importance of needs of 40 relatives of critically ill patients in an intensive care unit was studied by Molter (1976, 1979). The most important needs identified by the relatives included feeling hope, having caring personnel treat the patient, being physically near the patient, and being kept informed of the patient's condition, and having information presented honestly and understandably. Although some needs appeared to vary in importance according to the variables of age and socioeconomic status, significant differences between responses given according to these variables were not demonstrated. The need unanimously identified as being important to the relatives was the need for hope. Interestingly, support for the relatives was of lowest priority to the relatives. Moreover, as was documented in Hampe's (1975) study, relatives viewed the nursing staff as being responsible only for the care of the

patient and not for his family. The majority of needs identified as important to relatives were perceived by the relatives as having been met consistently and most of the time were met by nurses. The needs described in Molter's study were also identified in interviews with relatives of 30 patients in an intensive care unit in Rasie's (1980) study and in a survey of families of 30 brain-injured patients (Mauss-Clum & Ryan, 1981). Using a semi-structured interview schedule, Blichfeldt (1979) interviewed 12 family members within 72 hours of patients' ICU admissions. All family members expressed the need to be informed of the patient's condition, to be with the patient, to be comfortable in the waiting room, and to have confidence in the health care givers.

In an exploratory study, Gillis (1981) studied the expressed needs of 51 family members of patients in several respiratory care units and the perceived importance of these needs according to the age of the family member and the age of the patient. 'Family member' was operationally defined as a "person, 18 years of age or older, related to the patient and who had visited the patient in the intensive care unit, or a significant other, 18 years of age or older, who expressed concern and caring for the patient and who visited the patient in the intensive care unit" (p. 17). As in Molter's study, results demonstrated that there was no significant relationship between the family members' rating of the importance of a need and the age of the family member or the age of the patient. In contrast to Hampe's (1975) study and Greenley's (1981) study, the above studies aimed at identifying the needs of family members of patients

in intensive care settings where there was a constant threat of death but also a reasonable possibility of recovery. In each of these studies, 'need' was generally defined as a felt requirement which, if met, would reduce immediate stress and assist the individual to cope with a changing environment (Gillis, 1981; Molter, 1976, 1979).

Research on family members' needs at various stages during an illness was conducted by Wilson (1975) who studied the observed and expressed nursing care needs of eleven families during three stages of a respiratory illness. With particular reference to the patients' stay in the intensive care unit, her data indicated the existence of family members' need for information regarding the patients' treatment and the disease process as well as the need for privacy and information pertaining to the physical layout of the hospital.

In contrast to some of the findings of previously-cited studies, Norbeck (1981) reported that demographic variables such as age, sex, education, socioeconomic status and marital status were associated with the amount of social support that was needed by a person during a stressful period and also how much support was available to the person. Finlayson (1976) found that wives of middle class coronary patients had more diverse sources of support than wives of working class patients who tended to be limited to support from their families of origin. It was also suggested by the author that the availability of social support may in turn influence family members' perceptions of their needs during a period of crisis (Finlayson, 1976). Apart from the study by Gillis (1981) in which the relationship between age and

the perceived importance of family members' needs was examined, no investigations have specifically explored the relationship between other demographic variables such as age, sex and education, and the importance of needs as they are perceived by family members of ICU patients.

Summary

Although only preliminary research efforts have been made regarding patients' families, a review of existing literature has revealed that sudden illness resulting in admission to an intensive care environment, can have a great impact upon the patients' family members.

Studies to date have revealed that family members of patients in intensive care units appear to have special needs arising from the patients' uncertain prognoses as well as the family members' unfamiliarity with the intensive care environment. The following needs have been identified from a review of the literature as being important to family members of ICU patients: need for knowledge about the patients' condition and prognosis as well as about the equipment in the intensive care unit; need for information to be presented honestly and understandably; need for acceptance by hospital staff; need for support of feelings; need for participation in the patients' care; and need for physical comfort in the waiting room environment. Of the studies specifically exploring the needs of family members of ICU patients, only one was undertaken in Canada.

The literature indicates that interaction between ICU nurses and patients' families occurs during brief periods, and as a

result, interventions for family members tend to be directed toward meeting the needs commonly experienced by family members as they are perceived by the staff. It thus becomes important to determine the congruence between nurses' and family members' perceptions of their needs. Some of the studies indicated that family members did not expect nurses to meet their needs related to the support and discussion of their feelings (Hampe, 1975; Molter, 1976, 1979). One would question whether family members perceive the nurse's role to include meeting their needs, or only those of the patient.

A review of the literature thus has supported the relevance of exploring the needs of family members of ICU patients, with particular reference to the following research questions:

1) How do family members' perceptions of their needs differ from ICU nurses' perceptions of those needs?
2) How do family members' perceptions of nursing's responsibility to meet their needs differ from ICU nurses' perceptions of nursing's responsibility to meet these needs?

As suggested by Gillis (1981) further research is necessary to explore the needs of family members of ICU patients as they are perceived by family members and nurses and it is toward this end that the present study is directed. The methodology employed is outlined in the following chapter.

CHAPTER IV

METHODOLOGY

Research Design

A descriptive survey research design involving two independent samples was used in this study to describe and compare family members' and ICU nurses' perceptions of the needs of family members of ICU patients. The samples and setting of the study, data collection procedures, research instrument, ethical considerations and the data analysis procedures are discussed in the following sections.

Study Samples

Family Members

The family members in the study were those of patients admitted to the Adult Multisystems Failure Intensive Care Unit at the University of Alberta Hospital between July and October 1982. Family member participants were initially identified by the researcher while the patient was in the intensive care unit, utilizing recommendations from the assistant charge nurses and information obtained in the unit admissions record and the patients' Kardex. The following criteria were used in the initial selection of patients whose family members were included in the study:

1) the patient was eighteen years of age or older; and
2) the patient had spent between three and thirty days in the ICU following unanticipated admission resulting from trauma or other medical and/or surgical conditions.

The following criteria were established for inclusion of

family members in this study. Each family member:

1) was eighteen years of age or older;
2) was related to the patient or living with the patient;
3) had visited the patient three or more times while the patient was in the intensive care unit;
4) was able to read and understand English; and
5) had given written consent to participate in the study.

For ethical and methodological reasons, only family members of patients who were in the recuperative stage of illness and who were in stable condition following their transfer from the ICU were included in the study. Family members whose relative/housemate died in the ICU were excluded from the study not only because the family members would be experiencing emotional trauma as a result of the patient's death, but it was also believed that the bereavement process could alter their perceptions of their needs (Greenblatt, 1977; Lewis, 1963; Parkes, 1970). For similar reasons, members whose relative/housemate was transferred to a psychiatric ward or diagnosed as being terminally ill were also excluded from the study. A maximum of three family members per patient were included in the study.

ICU Nurses

All registered nurses who were nursing on a full-time or part-time basis in the Adult Multisystems Failure Intensive Care Unit at the University of Alberta Hospital and who had worked a minimum of three months in the unit were eligible to participate in the study. To ensure adequate exposure of the nurses to ICU families, part-time nurses included in the study were those who worked a minimum

of 24 hours per week in the intensive care unit. A staff list was obtained from the head nurse in the unit and a convenience sample of ICU nurses who agreed to participate in the study was acquired. In addition to the above criteria, all nurses included in the study gave written consent to participate.

Setting

The hospital utilized in this study is a large metropolitan teaching hospital. The Adult Multisystems Failure Intensive Care Unit is a ten bed unit which contains specialized equipment for monitoring and supporting critically ill patients. At the time of this study there were no health professionals employed in the unit on a full-time basis to deal exclusively with the families of patients in the intensive care unit. Nursing personnel working in the ICU provided the main contact with patients' families. Hospital chaplains and social workers were also available to family members.

Data Collection Procedure

The investigator had daily contact with the assistant charge nurses in the ICU to initially identify patients whose family members were eligible for inclusion in the study. Within three days following the transfer of the patient to a ward, family members meeting the study criteria were contacted by the researcher in the following manner. The researcher went to the ward and introduced herself to the patient after seeking advice from the nursing staff regarding the patient's condition. Family members were often met on the ward during this initial contact with the patient. Some family members were contacted by phone to arrange a convenient time for them to meet with

the researcher. During the meeting with the family members an explanation of the nature and purpose of the study was given and those agreeing to participate in the study signed a consent form (See Appendix A). Instructions for completion of the questionnaire were read to the family members and questionnaires were given to family members to be returned by mail in a stamped envelope addressed to the researcher.

Data were collected from the ICU nurses after the last patient whose family member(s) were included in the study was transferred out of the ICU. This delay in data collection from the nurses was done firstly to eliminate the possible influence of the nurses' questionnaire on interact with family members in this study. It was thought that seeing the needs listed might stimulate nurses to pay greater attention to needs. Secondly, although the primary focus of this study was on "general" needs of family members of ICU patients, the researcher was also interested in identifying what might seem to be "unique" needs. For example, the literature would indicate that feelings of anger in family members are common ways in which family members deal with those feelings may be "unique". Only by delaying the nurses' responses until all data had been collected from family members could the investigator be sure that the nurses' responses would be based not only on their general experience with families of ICU patients, but on their total experience with these particular families.

Research Instrument

Following a review of the pertinent literature, the inves-

tigator selected a questionnaire developed by Molter (1976, 1979) to collect the required data in the present study. The questionnaire for family members (See Appendix B) consisted of 40 need statements with fixed-alternative answers. A four point Likert-type scale was used to measure the degree of importance of the needs experienced by family members. Each need was assessed by the family member as having been met or not been met. They were then asked to indicate who met the need and whether or not they felt it was a responsibility of nursing to meet the need. Space was provided (Question 41) for family members to add any needs which they experienced while their family member was in the intensive care unit but which were not included in the list of need statements. Demographic data such as age, sex, education, occupation, and relationship to the patient were collected for purposes of describing the sample on variables which are suggested by the literature as being relevant (Questions 43-46). Family members were also asked to indicate the approximate number of visits made to the patient while in the intensive care unit.

A questionnaire containing 40 similar need statements was given to the sample of ICU nurses (See Appendix B). The nurses were asked to rate the importance of the listed needs using a four point Likert-type scale and indicate whether or not they felt each of the needs was generally met. They were also asked to indicate whether they felt it was a responsibility of nursing to meet the needs listed. Space was provided (Question 41) for nurses to add any needs that they felt family members of ICU patients experience but which were not included in the list of need statements. Background data

such as age, sex, nursing education and nursing experience were collected for purposes of describing the sample (Questions 42-47).

Reliability and Validity

The questionnaire for family members was pretested by five family members who met the criteria previously outlined in order to assess the clarity of instructions and determine the length of time necessary to complete the questionnaire. These persons were not included in the sample of family members in this study. Minor revisions in the presentation of the questionnaire were made following this pretest. It was found that the questionnaire took approximately thirty minutes for completion.

The questionnaire for ICU nurses was submitted to five critical care nurses who have regular contact with patients' family members, to assess the clarity of instructions and determine the time needed to complete the questionnaire. These nurses were not included in the sample of ICU nurses. No revisions were made following this pretest and it was found that the questionnaire took approximately thirty minutes to complete.

Content validity of Molter's (1976, 1979) questionnaire was established in her study through an extensive review of the literature and by consultation with two clinical experts in critical care nursing. In Molter's study no additional needs were identified by the relatives, suggesting that the list of need statements appeared to be exhaustive. Identification of additional needs by family members was sought in this study through an open-ended question on the questionnaire. Comments of respondents to this question will be discussed

in Chapter V in the report of the findings. Factor analysis was carried out to construct validity of the instrument. Attempts to establish reliability of the questionnaire were not undertaken in the present study.

Ethical Considerations

The research proposal was submitted to the University of Alberta Hospital Nursing Research and Scholarly Activities Committee and to the Special Services and Research Committee of the Hospital for ethical review. Suggestions made by the committees were incorporated into the research design and the project was approved.

The nature and purpose of the study were explained to family members by the researcher. (See Appendix A.) Care was taken to emphasize that participation or non-participation in the study had no bearing on the care that the patient was receiving or would receive in the future. Confidentiality of all information received and anonymity in its reporting was assured verbally and in writing. All family members participating in the study signed a consent form (See Appendix A). As the period during which time a patient is in the intensive care unit is considered highly stressful for family members, questionnaires were completed by family members following the patient's transfer from the intensive care unit, when patients were stable and in the recuperative stage of illness.

All nurses who participated in the study were informed of the voluntary nature of their participation and anonymity of responses was assured in writing. Nurses who agreed to participate in the study signed a consent form. (See Appendix A.) Participants were assured by the researcher that a report of the findings would be available to

them upon completion of the study.

Data Analysis

Descriptive statistics were used to analyze the findings in relation to the previously outlined objectives.

With reference to the first objective, that of determining the degree of importance of the selected needs according to family members, the sum of rating values over all respondents was obtained for each need item and items were subsequently ranked in order of magnitude. Frequencies and percentage distributions were tabulated to determine whether or not family members felt their needs were met and by whom. Frequency and percentage distributions were also tabulated to determine nursing's responsibility to meet selected needs according to family members and ICU nurses. A similar procedure was carried out on data from the nurses.

Kendall's tau was utilized to measure the degree of relationship between the importance of need items and selected nurses' characteristics such as age, nursing education and nursing experience. Kendall's tau was also used to measure the degree of relationship between the importance of needs and selected demographic characteristics of family members.

Factor analysis was performed on the responses to the Likert-type scale items as a data reduction technique, and to identify the major factors or components of needs that were being measured.

Ratings on the Likert-type scale items were converted to five factor scores for both family members and nurses. Mean factor

scores were then compared using analysis of variance on independent variables such as age, sex, and socioeconomic class for family member respondents and the amount of nursing experience for nurse respondents. The reader is reminded of the non-experimental nature of the research design and non-random sampling technique used. Therefore probability interpretations arising from the analysis of variance procedures cannot be made. Further discussion of this is given along with the presentation of the research findings in the following chapter.

CHAPTER V

RESULTS AND DISCUSSION

In this chapter, the results of the study are presented and analyzed with regard to the research objectives outlined in Chapter I. Following a description of selected characteristics of the sample of family members and ICU nurses, the responses from family members are presented and discussed. Responses from the ICU nurses are then presented and compared to those of the family members. Finally, results of factor analysis on data obtained through the research questionnaire are discussed and interpreted in light of crisis models.

Characteristics of the Family Member Sample

Forty family members who met the criteria previously outlined participated in the study. Slightly over half of these were female (57.8%). Twenty-two (55.0%) of the family members were spouses, four were parents, 8 were children, five were siblings, and one was a fiancé. Of the 40 family members, 22 (55.0%) were over 35 years of age. Family members in the sample represented four socioeconomic classes, as estimated by the Two-Factor Index of Social Position (Hollingshead, 1957). The majority of family members (82.5%) were in classes III, IV and V which are largely representative of clerical workers, technicians and laborers. Eighty percent of the family members had made more than ten visits to the patient in the intensive care unit. A summary of the characteristics of the family member sample is presented in Table 1.

TABLE 1

CHARACTERISTICS OF FAMILY MEMBER SAMPLE (n=40)

Characteristic	Absolute Frequency	Relative Frequency (%)	Cumulative Frequency (%)
Age			
18-24 years	5	12.5	12.5
25-34 years	13	32.5	55.0
35-59 years	16	40.0	95.0
60+ years	6	15.0	100.0
Sex			
Male	17	43.0	43.0
Female	23	57.0	100.0
Socioeconomic Class			
Class II	6	15.0	15.0
Class III	10	25.0	40.0
Class IV	14	35.0	75.0
Class V	10	25.0	100.0
Relationship to Patient			
Spouse	22	55.0	55.0
Parent	4	10.0	65.0
Child	8	20.0	85.0
Sibling	5	12.5	97.5
Fiancé	1	2.5	100.0
Number of Visits to the Intensive Care Unit			
Five to Ten	8	20.0	20.0
Greater than Ten	32	80.0	100.0

Characteristics of the Nurse Sample

The sample consisted of thirty-one nurses who met the criteria for inclusion in the study. All of the nurses were female and 61.3% were between the ages of 25 and 34 years. Twenty-four (77.4%) of the nurses had a nursing diploma and seven (22.6%) possessed a degree. Experience in critical care nursing ranged from six months to eight years, with a median of 4 years. Overall experience in nursing ranged from 2 years to 15 years, with a median of 5 years. Of the 31 nurses, twenty-two (71.0%) were employed in the intensive care unit on a full-time basis. The remainder (29.0%) worked part-time in the intensive care unit. A summary of the characteristics of the nurse sample is presented in Table 2.

Family Members' Responses

Importance of the Needs

Four categories were used in assigning values to the importance of the needs. These were as follows:

Category	Category Value
Not important	1
Slightly important	2
Important	3
Very important	4

Category values were multiplied by their frequencies to obtain a score on each need statement. A value of 2.5 was assigned to nonresponses in the calculation of scores. Based upon the resulting scores, the needs were ranked from most important to least

TABLE 2

SELECTED CHARACTERISTICS OF NURSE SAMPLE (n=31)

Characteristic	Absolute Frequency	Relative Frequency (%)	Cumulative Frequency (%)
Age			
18-24 years	7	22.6	22.6
25-34 years	19	61.3	83.9
35-59 years	5	16.1	100.0
Highest Level of Nursing Education			
Nursing Diploma	24	77.4	77.4
Nursing Degree	7	22.6	100.0
Experience in Critical Care Nursing			
Less than 2 years	3	9.6	9.6
2-5 years	23	74.2	83.8
Greater than 5 years	5	16.2	100.0
Nursing Experience			
Less than 2 years	4	12.9	12.9
2-5 years	17	54.8	67.7
Greater than 5 years	10	32.3	100.0
Employment Status			
Full-time	22	71.0	71.0
Part-time	9	29.0	100.0

important. It is interesting to note that all the needs listed on the questionnaire were considered by at least one family member to be 'very important'. The ranking of needs from most important to least important by frequency of responses from family members is shown in Table 18, Appendix C.

The most important needs according to the family members are similar to those identified by relatives of critically ill patients in studies by Irwin and Meier (1973), Molter (1976, 1979) and Gillis (1981). Honesty in answering questions and a caring attitude toward family members rated important as did information concerning the patient's prognosis and treatment. The ten most important needs are listed in Table 3.

The need to feel that there is hope was considered to be very important to all forty family members. Ujhely (1963) asserts that the maintenance of a sense of hope is necessary in order that family members be able to deal with the uncertainty of the patient's prognosis.

The needs that were least important to the family members largely pertained to the physical environment of the hospital and to having someone concerned about their health. These findings are consistent with those of earlier cited studies (Breu & Dracup, 1978; Gillis, 1981; Hampe, 1975) and suggest that the focus of the family members' attention is on the patient rather than on themselves.

One of the least important needs of family members in this study, as well as in the investigation by Irwin and Meier (1973) was the need to be alone. Family members indicated that while it was

TABLE 3

TEN MOST IMPORTANT NEEDS AS PERCEIVED BY FAMILY MEMBERS

Rank	
1.	To feel that there is hope.
2.	To know that they would be called at home if there were any changes in the patient's condition.
3.	To have their questions answered honestly.
4.	To know the patient's chances of becoming well.
5.	To feel that hospital personnel care about the patient.
6.	To have reassurance that the best possible care is being given to the patient.
7.	To see the patient frequently.
8.	To have specific facts concerning the patient's progress.
9.	To receive information about the patient's condition at least once a day.
10.	To have explanations given in terms that they can understand.

important to have a place to be alone at the hospital, it was not important to be alone generally during the time that the patient was in the intensive care unit. Table 4 lists the ten least important needs according to the family members.

Kendall's tau was used to measure the degree of association between the ranked importance of the needs and family members grouped by age, sex and socioeconomic class. As Table 5 illustrates, there was a high degree of association in the ranked importance of needs between groups. The variables of age, sex and socioeconomic class thus did not appear to influence the relative importance of the needs for family members in this study.

Needs Met

In relation to whether needs were met, the ten most important needs were considered by 34 (85%) of the family members to be met. Of the needs rated as 'important' or 'very important' by more than 50% of the family members, only three were assessed as not being met. These were:

1. The need to talk to the doctor at least once a day. This need was assessed by only 20% of the family members as being met, while 95% of the family members considered it to be 'important' or 'very important'.
2. The need to have a place to be alone while in the hospital. This need was assessed by only 7.5% of the family members as being met, while 77.5% of the family members considered it 'important' or 'very important'.

TABLE 4

TEN LEAST IMPORTANT NEEDS AS PERCEIVED BY FAMILY MEMBERS

Rank	
31.	To do some of the physical care for the patient.
32.	To talk to the same nurses every day about the patient's condition.
33.	To have another person with them while they visit the patient at the bedside.
34.	To have a telephone nearby where they are waiting.
35.	To have good food available to them while at the hospital.
36.	To be alone.
37.	To have a bathroom near the waiting room.
38.	To be told about chaplain services.
39.	To have someone concerned about their health.
40.	To have someone encourage them to cry.

TABLE 5

KENDALL'S TAU FOR RANKED IMPORTANCE OF NEEDS BETWEEN FAMILY MEMBER GROUPS

Age	18-24 years	25-34 years	35-59 years
25-34 years	0.7579		
35-59 years	0.8784	0.8490	
60+ years	0.7270	0.8406	0.8510

sex	Male
Female	0.8542

Socioeconomic Class	II	III	IV
III	0.7555		
IV	0.8741	0.7607	
V	0.7698	0.7656	0.8074

3. The need to have comfortable furniture in the waiting room. This need was assessed by only 7.5% of the family members as being met, while 90.0% of the family members considered it to be 'important' or 'very important'.

Three other needs were considered by less than 50% of the family members to be met. They were:

1. The need to do some of the physical care for the patient.
2. The need to be alone.
3. The need to have someone encourage family members to cry.

However, these needs ranked relatively low in importance overall, with less than 50% of the family members considering them to be 'important' or 'very important'. Table 6 shows the frequency of responses regarding whether needs were met.

Who Met the Needs

Thirty-one (77.5%) of the 40 family members indicated that nurses were involved in meeting their needs, 19 (47.5%) indicated that doctors met their needs and seven indicated that chaplains were involved in meeting their needs. Nurses were seen as meeting needs related to the support and reassurance of family members while doctors were seen as primarily meeting informational needs regarding the patient's treatment and prognosis.

It was anticipated that some needs would be met by resources other than hospital personnel. Nineteen (47.5) of family members indicated that other visitors met the need to have reassurance that the best possible care was being given to their family member. This finding would support observations by Reichle (1975) and Rasie

TABLE 6

FREQUENCY OF RESPONSES FROM FAMILY MEMBERS INDICATING NEED MET (n=40)

Need	Absolute Frequency	Relative Frequency[a] (%)
1. To feel accepted by hospital personnel.	40	100.0
2. To have their questions answered honestly.	40	100.0
3. To be able to visit whenever they want.	39	97.5
4. To have a place to be alone while at the hospital.	3	7.5
5. To be told about people in the hospital who could help them.	33	82.5
6. To have a specific person at the hospital to call when they cannot be there.	38	95.0
7. To be told about how their family member is going to be treated medically.	37	92.5
8. To have a telephone nearby where they are waiting.	39	97.5
9. To have good food easily available to them while at the hospital.	31	77.5
10. To feel that hospital personnel care about their family member.	39	97.5
11. To have the waiting room near the family member.	38	95.0
12. To be told exactly what is being done for their family member.	39	97.5
13. To be alone.	11	27.5
14. To be told about chaplain services.	23	57.5

TABLE 6 (Continued)

Need	Absolute Frequency	Relative Frequency[a] (%)
15. To feel that there is hope.	40	100.0
16. To know why things are being done for their family member.	39	97.5
17. To be told about transfer plans when they are being made.	36	90.0
18. To have someone explain the sounds and equipment in the intensive care unit before they visit for the first time.	28	70.0
19. To have someone to talk to about the possibility that their family member might die.	32	80.0
20. To talk to someone about their feelings.	29	72.5
21. To have direction from the staff as to what is expected of them when they are at their family member's bedside.	35	87.5
22. To know about the various types of staff taking care of their family member.	35	87.5
23. To see their family member frequently.	39	97.5
24. To have specific facts concerning their family member's progress.	35	87.5
25. To be involved with the physical care of the family member.	13	32.5
26. To have friends nearby for support.	32	80.0
27. To talk to the doctor at least once a day.	8	20.0
28. To have a bathroom near the waiting room.	37	92.5

TABLE 6 (Continued)

Need	Absolute Frequency	Relative Frequency[a] (%)
29. To be reassured that it is all right to leave the hospital for a while.	38	95.0
30. To have explanations given in terms that they can understand.	39	97.5
31. To have reassurance that the best possible care is being given to their family member.	40	100.0
32. To know what type of staff can give them certain kinds of information.	35	87.5
33. To have comfortable furniture in the waiting room.	3	7.5
34. To have someone concerned about their health.	29	72.5
35. To know their family member's chances of becoming well.	34	85.0
36. To know that they would be called at home if there were any changes in their family member's condition.	36	90.0
37. To talk to the same nurses every day about their family member's condition.	11	27.5
38. To have someone to encourage them to cry.	4	10.0
39. To receive information about their family member's condition at least once a day.	35	87.5
40. To have another person with them while they visit their family member at the bedside.	23	57.5

[a]Relative frequencies are underlined where need was met for less than 50% of family members while more than 50% of family members considered it to be 'important' or 'very important'.

(1980) that visitors receive a great deal of mutual support during the long waiting periods between visits to the intensive care unit. The frequency of responses in relation to who met the needs is presented in Table 20, Appendix C.

Responsibility of Nursing To Meet the Needs

An additional objective of this study was to determine family members' perceptions regarding the responsibility of nursing to meet their needs. Results indicated that the meeting of each need listed was considered by at least one family member to be a responsibility of nursing.

Family members indicated that it is a responsibility of nursing to meet informational needs pertaining to the intensive care environment and to the patient's general progress. Nurses may be viewed as providing interpretation of the unfamiliar ICU environment for family members, enabling a better understanding of the situation.

An unexpected finding was that only eight of the family members indicated that it was a responsibility of nursing to meet the need to talk to someone about their feelings. Similarly, only one family member considered it to be a responsibility of nursing to be concerned about their health. These findings support those of a study by Hampe (1975) where relatives felt that nursing staff were responsible only for the care of the patient, although concern for the relatives' health was appreciated.

Additional Needs Identified

The content of responses to Question 41 regarding additional needs experienced by family members was categorized by the investigator. Eight (20%) of the family members responded to this question. Although most of the comments directly related to need items included in the questionnaire, additional needs were identified and are discussed below.

(1) Physical Surroundings: Six of the family members commented on the lack of privacy and the inadequacy of the waiting room facilities. Some of the responses were:

> "The waiting room was situated so that patients had to be wheeled by you while waiting - I found this very disturbing."

> "The sitting room needed to be bigger so that all visitors to intensive care could find a seat."

> "I was appalled by the poor waiting room for visitors. It was small and always crowded. There were times when I just wanted to get away from there but there was no place else to wait."

(2) Emotional Support: Four of the family members indicated that emotional support was needed while the patient was in the intensive care unit. One spouse expressed that she needed to have more support in relation to her feelings of anger, as reflected in the following comment:

> "I needed to be told that it was okay to feel the anger I was feeling over my husband's condition and that it was normal to feel that way."

(3) Information Regarding the Patient: Four of the family members commented that they needed to have more frequent information about the patient's progress. Frustration over not talking regularly with doctors was expressed by two of the family

members.

> "Doctors should arrange to see families - we shouldn't have to try to catch them!"
>
> "I was annoyed at not having the chance to talk to the doctors about my husband's condition. It seemed that they were always busy and didn't have time for me. I realize they were busy with other patients, but I would have liked to know more about what was going on at the time."

Comments of the family members suggest that each of these needs, when unmet, serves to heighten anxiety and logically could lessen the family member's ability to cope with the situation. Although family members in Molter's (1976, 1979) study did not identify any further needs, additional needs were identified by family members in the present study, suggesting that needs listed on the questionnaire were not exhaustive of those experienced by family members of ICU patients.

Nurses' Responses and Comparisons with Those of Family Members

Importance of the Needs

Each of the needs listed on the questionnaire was considered to be important by at least one nurse. Nurses' ranking of needs indicated that the needs important to family members were also considered important to nurses. Table 19, Appendix C, shows the frequency of responses regarding the importance of needs.

In relation to the ten needs which ranked most important to family members, nurses' responses were in agreement on 70% of these. It is interesting to note that the need to feel that there is hope ranked twelfth among nurses while it ranked first for the family members, and was unanimously considered to be very important. The need to discuss the possibility of death with others ranked among the

most important needs according to nurses, however, ranked only twentieth for family members. This could suggest that family members are not willing to face the possibility of the patient's death and wish to maintain hope during the period of uncertain prognosis. However, because family members in this study were those of recuperating patients, this need may not have been as important to them as to relatives of dying patients. Needs ranking most important and least important are listed in Tables 7 and 8.

Kendall's tau was used to measure the degree of association between the importance of needs and nurses' age and length of nursing experience. As Table 9 demonstrates, there was a high degree of association between these variables, indicating that age or length of nursing experience did not appear to be associated with the relative importance of needs as perceived by nurses in the sample.

Needs Met

As was the case in family members' responses, responses from the ICU nurses indicated that the majority of needs were met according to more than 50% of the sample. Thirty-two of the needs were seen as being met. Fifty percent or more of the nurses indicated that eight of the needs listed were not generally met. These were:

1. The need to have a specific person to call when family members could not be at the hospital.
2. The need to have a place to be alone at the hospital.
3. The need to be alone.
4. The need to do some of the physical care for the patient.
5. The need to talk to the doctor at least once a day.
6. The need to have comfortable furniture in the waiting room.

TABLE 7

TEN MOST IMPORTANT NEEDS AS PERCEIVED BY ICU NURSES

Rank	
1.	To have their questions answered honestly.
2.	To feel that hospital personnel care about the patient.
3.	To have explanations given in terms that they can understand.
4.	To know that they would be called at home if there were any changes in the patient's condition.
5.	To talk to someone about the possibility that the patient might die.
6.	To be told how the patient is going to be treated medically.
7.	To know why things are being done for the patient.
8.	To have reassurance that the best possible care is being given to the patient.
9.	To receive information about the patient's condition at least once a day.
10.	To talk to someone about their feelings.

TABLE 8

TEN LEAST IMPORTANT NEEDS AS PERCEIVED BY ICU NURSES

Rank	
31.	To have comfortable furniture in the waiting room.
32.	To be able to visit whenever they want.
33.	To have someone concerned about their health.
34.	To have a bathroom near the waiting room.
35.	To have someone encourage them to cry.
36.	To have good food easily available to them while at the hospital.
37.	To do some of the physical care for the patient.
38.	To have a specific person at the hospital to call when they cannot be there.
39.	To talk to the same nurses every day about the patient's condition.
40.	To have another person with them while they visit the patient.

TABLE 9

KENDALL'S TAU FOR RANKED IMPORTANCE OF NEEDS BETWEEN NURSE GROUPS

Age	18-24 years	25-34 years
25-34 years	0.8184	
35-59 years	0.7249	0.7063

Experience in Critical Care Nursing	<2 years	2-5 years
2-5 years	0.8351	
>5 years	0.8042	0.7546

Overall Nursing Experience	<2 years	2-5 years
2-5 years	0.8136	
>5 years	0.7487	0.7912

7. The need for someone to encourage family members to cry.
8. The need to have information about the patient's condition at least once a day.

Of these needs, three were considered by more than 50% of the nurses to be 'important' or 'very important': the need for family members to have a place to be alone at the hospital, the need to talk to the doctor daily, and the need to have daily information concerning the patient's condition. A summary of nurses' responses regarding whether the needs listed are generally met is presented in Table 10.

Responsibility of Nursing to Meet the Needs

The responses of the ICU nurses to the question regarding nursing's responsibility to meet the listed needs were generally congruent with those given by family members. However, a few major differences are interesting to note. In relation to having a specific person at the hospital to call when they could not be there, 35 (87.5%) of the family members indicated that meeting this need was a responsibility of nursing. In comparison, only 12 (38.7%) of the nurse sample indicated that it was a responsibility of nursing to meet this need. Perhaps nurses perceive their role to act as a liason with family members only when the family members are present at the hospital. Constraints of time and workload may also limit the ability of the nurse in intensive care to meet this need.

In relation to meeting the need to be told how the patient is going to be treated medically, 30 (75.0%) of the family members

TABLE 10

FREQUENCY OF RESPONSES FROM ICU NURSES INDICATING NEED MET (n=31)

Need	Absolute Frequency	Relative[a] Frequency (%)
1. To feel accepted by hospital personnel.	30	96.8
2. To have their questions answered honestly.	25	80.6
3. To be able to visit whenevery they want.	21	67.7
4. To have a place to be alone while at the hospital.	0	0.0
5. To be told about people in the hospital who could help them.	26	83.9
6. To have a specific person at the hospital to call when they cannot be there.	10	32.3
7. To be told about how their family member is going to be treated medically.	25	80.6
8. To have a telephone nearby where they are waiting.	29	93.5
9. To have good food easily available to them while at the hospital.	11	35.5
10. To feel that hospital personnel care about their family member.	29	93.5
11. To have the waiting room near the family member.	27	87.1
12. To be told exactly what is being done for their family member.	23	74.2
13. To be alone.	9	29.0
14. To be told about chaplain services.	22	71.0
15. To feel that there is hope.	28	90.3

TABLE 10 (Continued)

Need	Absolute Frequency	Relative[a] Frequency (%)
16. To know why things are being done for their family member.	28	90.3
17. To be told about transfer plans when they are being made.	26	83.9
18. To have someone explain the sounds and equipment in the intensive care unit before they visit for the first time.	25	80.6
19. To have someone to talk to about the possibility that their family member might die.	18	58.1
20. To talk to someone about their feelings.	19	61.3
21. To have direction from the staff as to what is expected of them when they are at their family member's bedside.	25	80.6
22. To know about the various types of staff taking care of their family member.	29	93.5
23. To see their family member frequently.	26	83.9
24. To have specific facts concerning their family member's progress.	29	93.5
25. To be involved with the physical care of the family member.	14	45.2
26. To have friends nearby for support.	16	51.6
27. To talk to the doctor at least once a day.	6	19.4
28. To have a bathroom near the waiting room.	26	83.9
29. To be reassured that it is all right to leave the hospital for a while.	29	93.5

TABLE 10 (Continued)

Need	Absolute Frequency	Relative[a] Frequency (%)
30. To have explanations given in terms that they can understand.	22	93.5
31. To have reassurance that the best possible care is being given to their family member.	29	93.5
32. To know what type of staff can give them certain kinds of information.	23	74.2
33. To have comfortable furniture in the waiting room.	8	25.8
34. To have someone concerned about their health.	18	58.1
35. To know their family member's chances of becoming well.	26	83.9
36. To know that they would be called at home if there were any changes in their family member's condition.	29	93.5
37. To talk to the same nurses every day about their family member's condition.	7	22.6
38. To have someone to encourage them to cry.	11	35.5
39. To receive information about their family member's condition at least once a day.	26	83.9
40. To have another person with them while they visit their family member at the bedside.	19	61.3

[a]Relative frequencies are underlined where need is generally met according to less than 50% of ICU nurses while more than 50% of nurses consider it to be 'important' or 'very important'.

indicated it was a responsibility of nursing, in contrast to only 8 (25.8%) of the nurses. Nurses may feel that it is the physician's responsibility to discuss the patient's medical treatment with family members, and that they should only reinforce what has been said by the doctor.

Notable differences were observed regarding the responsibility of nursing to meet the need for family members to talk to someone about their feelings. Eight (20.0%) of the family members indicated that it was a responsibility of nursing to meet this need while 27 (87.1%) of the nurses indicated it was a responsibility of nursing. A contrast between family members' and nurses' responses was also observed in relation to the need to have someone encourage the family members to cry. Twenty-one (67.7%) of the nurses indicated that it was a responsibility of nursing to meet this need while only one of the family members indicated that it was a responsibility of nursing.

A final closely related finding pertains to the need to have someone concerned about the family members' own health. Eighteen (58.1%) of the nurses indicated that it was a responsibility of nursing to meet this need while only one of the family members indicated that it was a responsibility of nursing to meet this need. Although the emotional support needs were largely met by nurses according to family members, the above findings suggest that family members did not perceive ICU nurses to be in a role to provide emotional support for the patients' family members. Nurses on the other hand indicated that they have a responsibility to be supportive of family members' feelings. The difference between perceptions could logically interfere with nurses

intervening in ways that would be most beneficial to family members. Table 11 presents the frequency of responses of family members and ICU nurses regarding nursing's responsibility to meet the needs.

Additional Needs

As in the responses from family members, the content of nurses' responses regarding additional needs experienced by family members (Question 41) was categorized by the investigator. Six of the nurses responded to this question. Their comments are discussed below under two major categories.

(1) Physical Surroundings: Five of the nurses commented about family members having a private place where they could be alone while at the hospital and expressed dissatisfaction with existing facilities. Some of the comments appear below:

> "I think the waiting area available for families is terrible, because there is no privacy and it is in full view of patients going to and from the unit which may be upsetting."

> "We need a quiet room or place to take family members aside to discuss things with them where no interruptions will occur."

(2) Emotional Support: Four of the nurses commented that family members need emotional support from staff in order to effectively cope with their situation. The nurses' comments reflect that they were aware of family members' need for emotional support but at the same time felt that they were not able to spend enough time with family members to adequately meet this need.

> "I think families need to be told they're coping well, or giving good support, to increase their

TABLE 11

FREQUENCY OF RESPONSES INDICATING A RESPONSIBILITY OF NURSING TO MEET NEED

Need	Family Members		ICU Nurses	
	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)
1. To feel accepted by hospital personnel.	39	97.5	31	100.0
2. To have their questions answered honestly.	38	95.0	25	80.6
3. To be able to visit whenever they want.	27	67.5	28	90.3
4. To have a place to be alone while at the hospital.	1	2.5	4	12.9
5. To be told about people in the hospital who could help them.	35	87.5	25	80.6
6. To have a specific person at the hospital to call when they cannot be there.	35	87.3	12	38.7
7. To be told about how their family member is going to be treated medically.	30	75.0	8	25.8
8. To have a telephone nearby where they are waiting.	2	5.0	5	16.1
9. To have good food easily available to them while at the hospital.	1	2.5	2	6.5

TABLE 11 (Continued)

Need	Family Members		ICU Nurses	
	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)
10. To feel that hospital personnel care about their family member.	38	95.0	31	100.0
11. To have the waiting room near the family member.	1	2.5	5	16.1
12. To be told exactly what is being done for their family member.	38	95.0	18	58.1
13. To be alone.	2	5.0	8	25.8
14. To be told about chaplain services.	17	42.5	22	71.0
15. To feel that there is hope.	38	95.0	26	83.9
16. To know why things are being done for their family member.	38	95.0	25	80.6
17. To be told about transfer plans when they are being made.	39	97.5	29	93.5
18. To have someone explain the sounds and equipment in the intensive care unit before they visit for the first time.	38	95.0	30	96.8

TABLE 11 (Continued)

Need	Family Members		ICU Nurses	
	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)
19. To have someone to talk to about the possibility that their family member might die.	26	65.0	25	80.6
20. To talk to someone about their feelings.	8	20.0	27	87.1
21. To have direction from the staff as to what is expected of them when they are at their family members' bedside.	35	87.5	27	87.1
22. To know about the various types of staff taking care of their family member.	37	92.5	28	90.3
23. To see their family member frequently.	31	77.5	29	93.5
24. To have specific facts concerning their family member's progress.	27	67.5	20	64.5
25. To be involved with the physical care of the family member.	21	52.5	23	74.2
26. To have friends nearby for support.	1	2.5	4	12.9
27. To talk to the doctor at least once a day.	22	55.0	13	41.9

TABLE 11 (Continued)

Need	Family Members		ICU Nurses	
	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)
28. To have a bathroom near the waiting room.	0	0.0	2	6.5
29. To be reassured that it is all right to leave the hospital for a while.	34	85.0	30	96.8
30. To have explanations given in terms that they can understand.	37	92.5	25	80.6
31. To have reassurance that the best possible care is being given to their family member.	31	77.5	28	90.3
32. To know what type of staff can give them certain kinds of information.	38	95.0	26	83.9
33. To have comfortable furniture in the waiting room.	1	2.5	5	16.1
34. To have someone concerned about their health.	1	2.5	18	58.1
35. To know their family member's chances of becoming well.	27	67.5	11	35.5

TABLE 11 (Continued)

Need	Family Members		ICU Nurses	
	Absolute Frequency	Relative Frequency (%)	Absolute Frequency	Relative Frequency (%)
36. To know that they would be called at home if there were any changes in their family member's condition.	40	100.0	28	90.3
37. To talk to the same nurses every day about their family member's condition.	19	47.5	11	35.5
38. To have someone to encourage them to cry.	1	2.5	21	67.7
39. To receive information about their family member's condition at least once a day.	37	92.5	28	90.3
40. To have another person with them while they visit their family member at the bedside.	6	15.0	10	32.3

feelings of worthiness."

"I know that families need alot of support from us because of their fear and anxiety and I wish we had more time to spend with them. I think they need to have someone around who they can talk to at anytime because we're usually busy in the unit with the patient."

"What bothers me the most is that there is no one there to talk to the relatives between visits, especially when the patient is dying. They need to have a neutral person who will be there so they can express their feelings."

In contrast to responses from family members, no additional needs pertaining to information received by family members were identified by the nurses in the sample.

Factor Analysis

Factor analysis was performed using 39 of the Likert-scale items, as a data reduction technique and to identify the major categories of needs that were being measured. Item 15 (the need to feel that there is hope), was not included in the factor analytic procedures as there was no variation in responses on this item.

Initial orthogonal analysis identified twelve factors having eigenvalues greater than one and explaining 83.8% of the total variance in responses from family members. Items 13, 14, 34, 38 and 39 were eliminated from further analyses as they did not load highly on any of the factors and had low communality values. The remaining 34 items were used in a series of orthogonal and oblique analyses to find the most interpretable solution while still explaining a reasonable proportion of the total variance in responses. The best solution in light of the preceding criteria was a five

factor solution from the oblique rotation, which accounted for 54.9% of the variance in family members' responses. Table 12 shows the five factor solution based on family members' responses.

A similar procedure was also carried out on nurses' responses. Following an initial orthogonal analysis which identified eleven factors and explained 88.7% of the total variance, items 13, 14, 27, 28, 38 and 39 were eliminated from further analysis as they did not load highly on any of the factors and had low communality values. The remaining 33 items were used in a series of orthogonal and oblique analyses. The most satisfactory interpretation was found in a five factor solution from an oblique rotation which explained 63.0% of the variance in nurses' responses. This five factor solution is shown in Table 13. Each of the factors or categories will be discussed presently in terms of those items with a correlation of .50 or greater.

Factor I: Information Regarding Patient Treatment and Prognosis

The first factor relates primarily to information about the patient's condition and treatment regime. Items which had high correlation on this factor were as follows:

Item

2. I needed to have my questions answered honestly.
7. I needed to be told about how my family member was going to be treated medically.
12. I needed to be told exactly what was being done for my family member.
16. I needed to know why things were being done for my family member.

TABLE 12

FAMILY MEMBER RESPONSES: FIVE FACTOR SOLUTION

OBLIQUE PRIMARY FACTOR STRUCTURE MATRIX

Item Number	Item Content	Factors[a]				
		I	II	III	IV	V
2	honest answers	.614	.349	-.088	.123	.006
7	medical treatment	.757	.105	.005	.019	-.028
12	exact information	.598	.048	.025	.084	-.041
16	why treatment	.537	-.027	.017	.070	.171
24	specific facts	.581	.077	.101	.176	-.058
27	talk to doctor	.692	.041	-.027	.068	.121
30	understandable explanations	.674	.012	.511	.004	.086
31	best care	.524	-.048	.013	-.048	.140
35	patient's chances	.643	.063	-.023	.209	.082
1	accepted	-.147	.736	.052	.144	-.002
5	helpful people	.158	.786	.049	.004	.018
6	specific person	-.030	.833	.046	-.154	-.010
10	caring personnel	.152	.500	.057	.033	-.007
19	discuss possibility of death	.189	-.587	.015	.061	.046
20	discuss feelings	.194	.877	.008	-.067	.081
26	support from friends	.146	.730	.211	.006	.030
29	reassurance	.566	.557	-.107	.045	.064
36	called at home	.141	.740	.080	-.044	.170
17	transfer plans	-.226	.190	.513	-.101	.094
18	explanation of ICU	-.342	.083	.575	-.056	.172
21	direction of staff	-.093	-.039	.579	-.020	.045
22	types of staff	-.292	-.269	.693	.016	-.032
32	staff information	.197	-.011	.640	.040	.006
3	open visiting	.275	-.214	.019	.605	.043
23	see patient frequently	.025	.150	.217	.655	.055
25	involvement with care	.042	.070	.202	.581	-.094
37	continuity of nursing care	-.021	.376	-.318	.519	.003
40	another at bedside	.274	-.078	.098	.563	.067
4	place to be alone	-.071	.170	.147	.060	.624
8	telephone	-.207	.034	.001	-.180	-.621
9	good food	-.044	-.288	-.082	-.013	-.599
11	waiting room close	-.066	.009	-.012	.507	.573
28	bathroom	-.031	.091	-.122	-.001	.617
33	comfortable furniture	-.108	.151	.043	.036	.540

Note. Items have been reordered from the original questionnaire (See Appendix C) for ease in viewing loadings of .50 and greater on each factor.

[a]Loadings of .50 and greater are underlined.

[b]Items 13, 14, 34, 38 and 39 are not listed as they had low correlations on all factors and low communality values.

TABLE 13

NURSE RESPONSES: FIVE FACTOR SOLUTION,

OBLIQUE PRIMARY FACTOR STRUCTURE MATRIX

Item Number	Item Content	Factors[a]				
		I	II	III	IV	V
2	honest answers	.598	.038	-.247	.011	-.116
7	medical treatment	.842	.092	-.136	.059	.268
12	exact information	.732	-.086	.142	.007	.083
16	why treatment	.637	.137	.026	.079	-.146
17	transfer plans	-.593	.067	.044	.129	.006
24	specific facts	.761	.020	-.095	.105	.139
30	understandable explanations	.573	-.190	.431	-.036	.048
31	best care	.742	.135	-.320	.045	-.031
35	patient's chance	.748	.085	-.017	.089	-.115
1	accepted	-.273	.647	.139	.122	-.103
5	helpful person	-.148	.780	.024	.268	-.098
6	specific person	.071	.543	-.164	-.088	.047
10	caring personnel	-.233	.619	-.097	-.031	.087
19	possibility of death	.498	-.802	-.084	-.093	-.062
20	discuss feelings	.011	.793	.073	-.120	.032
22	types of staff	.042	.565	.185	-.320	.008
26	support from friends	-.046	.714	.252	.023	.286
29	reassurance	-.260	.553	.054	-.164	-.214
36	called at home	.330	.501	-.058	.074	.160
37	continuity of nursing care	.194	-.567	.049	.043	.083
18	explanation of ICU	.450	.121	-.587	.096	.215
21	direction from staff	.277	-.031	-.660	-.010	.005
32	staff information	.179	.043	.768	-.032	.118
3	open visiting	-.059	.299	.003	.519	.132
11	close waiting room	-.033	.153	.075	-.832	.591
23	see patient frequently	.239	-.272	.020	.529	.033
25	involvement with care	-.047	-.221	.037	.671	-.056
40	another at bedside	.073	.064	-.021	.526	.012
4	place to be alone	.029	.242	.134	.229	.662
8	telephone	-.025	.187	.158	.135	.612
9	good food	.071	.069	.231	.077	.832
33	comfortable furniture	-.163	-.058	.272	.128	-.533

Note. Items have been reordered from the original questionnaire (See Appendix D) for ease in viewing loadings of .50 and greater on each factor.

[a]Loadings of .50 and greater are underlined.

[b]Items 13, 14, 27, 28, 38 and 39 are not listed as they had low correlations on all factors and low communality values.

24. I needed to have specific facts concerning my family member's progress.
27. I needed to talk to the doctor at least once a day.
30. I needed to have explanations given in terms that I could understand.
31. I needed reassurance that the best possible care was being given to my family member.
35. I needed to know my family member's chances for becoming well.

Items on the nurses' questionnaire corresponding to those listed above correlated highly on this category, with the exception of item 27. Item 17 correlated highly on this factor for the nurse responses but not for family members.

Factor II: Supportive People

The second factor relates primarily to the discussion of feelings as well as the presence of caring people. Items which demonstrated high correlation on this factor were as follows:

Item

1. I needed to feel accepted by hospital personnel.
5. I needed to be told about people in the hospital who could help me.
6. I needed to have a specific person at the hospital to call when I couldn't be there.
10. I needed to feel that hospital personnel cared about my family member.
20. I needed to talk to someone about my feelings.

26. I needed to have friends nearby for support.

29. I needed to be reassured that it was all right to leave the hospital for a while.

36. I needed to know that I would be called at home if there were any changes in my family member's condition.

Item 19, the need to have someone to talk to about the possibility that the patient might die, had a high negative correlation on this factor, suggesting that this was not an important need for these family members. Items on the nurses' questionnaire which were highly correlated on this factor corresponded to those listed above. However, two additional need items had high correlations on this factor. These were:

Item

22. They need to know about the various types of staff taking care of their family member.

37. They need to talk to the same nurses every day about their family member's condition.

Factor III: Information Related to Intensive Care Environment

Factor III generally relates to information about the intensive care unit. The following items were highly correlated on this factor:

Item

17. I needed to be told about transfer plans when they were being made.

18. I needed to have someone explain the sounds and equipment in the intensive care unit before I visited the first time.

21. I needed direction from the staff as to what was expected of me while I was at my family member's bedside.

22. I needed to know about the various types of staff taking care of my family member.

30. I needed to have explanations given in terms that I could understand.

32. I needed to know what type of staff could give me certain kinds of information.

Only three items were highly correlated on this factor and these corresponded to items 18, 21, and 32 listed above.

Factor IV: Patient Visiting

Factor IV generally pertains to visiting the patient in the intensive care unit and involvement with patient care. Items which correlated highly on this factor were as follows:

Item

3. I needed to be able to visit whenever I wanted.

23. I needed to see my family member frequently.

25. I needed to do some of the physical care for my family member.

37. I needed to talk to the same nurses every day about my family member's condition.

40. I needed to have another person with me when I visited my family member.

Items on the nurses' questionnaire corresponding to those listed above also were highly correlated on this factor. In addition,

item 11, the need to have the waiting room close to the family member, was highly correlated.

Factor V: Physical Surroundings in Hospital

Factor V relates primarily to the physical environment within the hospital. The following items were highly correlated on this category:

Item	
4.	I needed to have a place to be alone while at the hospital.
11.	I needed to have the waiting room near my family member.
28.	I needed to have the bathroom near the waiting room.
33.	I needed to have comfortable furniture in the waiting room.

Items 8 and 9, pertaining to having a telephone nearby and having good food available had high negative correlations on this factor.

This factor accounted for 7.2% of the variance in nurses' responses. Items on the nurses' questionnaire corresponding to those listed above loaded highly on this factor, with the exception of item 11.

Overall, items which correlated highly on the factors identified through factor analysis were similar using responses from family members and nurses. Exceptions to this could possibly be due to measurement error.

Correlation Among the Factors

Tables 14 and 15 illustrate the correlation among the five factors. Using responses from both the family members and nurses, Factor I correlated low negatively with Factor II while low positive correlations were present between Factor I and Factors III, IV and V. Factors II and III also showed low negative correlation, while Factors III and IV correlated low positively. This would suggest that ratings on the need items by each respondent were converted to five factor scores for both family members and nurses. Mean factor scores were then compared on various independent variables such as age, sex, and socioeconomic class for family member respondents, and amount of nursing experience for nurse respondents.

Mean Factor Score Differences: Family Members

Regarding supportive feelings and presence of caring people, no statistically significant differences (α=.05) were demonstrated among family members grouped on the variables of age, sex or socioeconomic class. This would suggest that supportive and caring personnel are important to most family members.

One way analysis of variance demonstrated a statistically significant difference (α=.05) among age groups in relation to information about the intensive care unit. Younger family members demonstrated the highest mean factor score, suggesting that younger family members would rate needs pertaining to information about the intensive care environment to be more important than would older family members. A summary of the results of one way analysis of variance on this category appears in Table 16. A statistically significant difference

TABLE 14

FACTOR ANALYSIS: FAMILY MEMBER RESPONSES

CORRELATION AMONG OBLIQUE PRIMARY FACTORS

Factor	I	II	III	IV	V
I	1.0000				
II	-0.1007	1.0000			
III	0.1150	-0.0461	1.0000		
IV	0.0114	0.1789	0.0379	1.0000	
V	0.0719	0.0020	0.0279	-0.0399	1.0000

TABLE 15

FACTOR ANALYSIS: NURSE RESPONSES

CORRELATION AMONG OBLIQUE PRIMARY FACTORS

Factor	I	II	III	IV	V
I	1.0000				
II	-0.1994	1.0000			
III	0.2190	-0.1074	1.0000		
IV	0.1034	0.0461	0.1098	1.0000	
V	0.1710	0.0495	0.1223	-0.0863	1.0000

TABLE 16

ONEWAY ANALYSIS OF VARIANCE ON FAMILY MEMBER DATA

FACTOR III: INFORMATION REGARDING INTENSIVE CARE ENVIRONMENT

Independent Variable	Variable Group	Mean Factor Score [a]	Source	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio	F Prob.
Age	18-24 yrs(5)	0.5318	Between Groups	3	6.9865	2.3288	3.012	0.0426*
	25-34 yrs(13)	0.4166						
	35-59 yrs(16)	0.3334	Within Groups	36	27.8379	0.7732		
	60+ yrs(6)	-0.4405	Total	39	34.8243			
Sex	male(17)	0.0813	Between Groups	1	0.0079	0.0079	0.009	0.9264
	female(23)	0.0528	Within Groups	38	34.8163	0.9162		
			Total	39	34.8243			
Socioeconomic Class	Class II(6)	0.5431	Between Groups	3	2.3216	0.7739	0.883	0.4595
	Class III(10)	-0.2444						
	Class IV(14)	0.1623	Within Groups	35	30.6858	0.8767		
	Class V(10)	0.0533	Total	38	33.0075			

[a] Factor scores are in standard score form, having a mean=0, standard deviation=1.0 .

* Indicates significance at 0.05 level.. Because of potential bias in sampling, results should not be interpreted as though based on rigorous statistical inference.

was also demonstrated (α=.05) among age groups on Factor V pertaining to the physical surroundings of the hospital. Family members in the highest age group demonstrated the highest mean factor score, suggesting that older family members would rate needs pertaining to physical surroundings in the hospital as more important than would younger family members. A summary of the results of the analysis of variance on Factor V appears in Table 17.

Mean Factor Score Differences: Nurses

As the sample of nurses was relatively homogeneous with respect to age, sex and nursing education, one way analysis of variance was only performed on the five factors using 'total nursing experience' as the independent variable. Results did not demonstrate any statistically significant differences (α=.05) among groups of nurses on any of the factors.

Summary of Factor Analysis Results

Through factor analytic procedures, five factors were identified using responses from family members and nurses. These factors included information regarding the patient's treatment and prognosis, supportive people, information related to the intensive care environment, patient visiting, and physical surroundings in the hospital.

The factor analysis performed on the responses on the rating scale suggested a degree of construct validity in that the items separated into five factors on both family members' and nurses' responses. However, two major limitations must be kept in mind when

TABLE 17

ONEWAY ANALYSIS OF VARIANCE ON FAMILY MEMBER DATA

FACTPR V: PHYSICAL SURROUNDINGS IN HOSPITAL

Independent Variable	Variable Group	Mean Factor Score [a]	Source	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio	F Prob.
Age	18-24 yrs(5)	0.1465	Between Groups	3	6.8849	2.2950	3.074	0.0398*
	25-34 yrs(13)	0.3062						
	35-59 yrs(16)	0.3515	Within Groups	36	26.8752	0.7465		
	60+ yrs(6)	0.5720	Total	39	33.7601			
Sex	male(17)	0.2233	Between Groups	1	1.2341	1.2341	1.442	0.2373
	female(23)	-0.1321						
			Within Groups	38	32.5259	0.8559		
			Total	39	33.7601			
Socioeconomic Class	Class II(6)	0.0173	Between Groups	3	0.0159	0.0053	.006	0.9994
	Class III(10)	0.0462						
	Class IV(14)	0.0150	Within Groups	35	31.9628	0.9132		
	Class V(10)	-0.0057	Total	38	31.9787			

[a] Factor scores are in standard form, having a mean=0, standard deviation=1.0 .

* Indicates significance at 0.05 level. Because of potential bias in sampling, results should not be interpreted as though based on rigorous statistical inference.

interpreting the results of the factor analysis. First, the finding of a five factor solution which explained only 54.9% of the total variance in family member responses to 34 items and 63.0% of the total variance in nurse responses to 33 items renders the task of interpreting the data more difficult and the meaningfulness of the interpretation more suspect. The remaining unexplained proportion of variance must be considered error. The inability to explain more total variance is possibly due to a measurement problem. Second, as factor analysis was based on relatively small samples, it may have resulted in an unstable estimate of factors.

In terms of each factor, only two statistically significant differences were observed among groups of family members. Younger family members tended to rate needs relating to information about the intensive care environment, as more important than did older family members and older family members tended to rate needs pertaining to the physical environment of the hospital as more important than did younger family members. The finding that analysis of variance only yielded two significant results could possibly be due to the relatively small sample size and possible measurement errors. Larger, randomly selected samples should be employed to validate the present findings.

Interpretation of Major Findings in Light of Crisis Frameworks

One of the objectives in this study was to examine the utility of both a medical and a nursing model of crisis in interpreting the needs of family members as they were described in the findings.

The medical model of crisis (Caplan, 1964; Rapaport, 1962; and others) postulates that an emotional crisis is evoked when the usual homeostatic, problem-solving mechanisms break down in the face of an overwhelming event. Critical illness necessitating a patient's admission to the intensive care unit is not an everyday challenge with which people have to cope and may well be overwhelming to family members. Indeed, the uncertainty of the patient's prognosis and unfamiliarity with the intensive care environment naturally place increased demands upon family members' existing internal and external resources.

Findings from the present study indicated that family members needed most importantly to have honest, understandable answers to their questions and feel that someone cared about the patient. Responses from family members to the open-ended question demonstrated anger and annoyance when these needs were not met. Findings also suggested that nurses intervene as external resources by interpreting events for family members, thereby assisting family members to gain control of the situation. This attempt to gain control of the situation through seeking assistance from appropriate resources would be interpreted by this investigator as an adaptive response. Family members would thus not be considered to be in "crisis" as it is defined by the medical model, but rather to be seeking external resources to support their present coping abilities, as outlined in the nursing model of crisis. In this regard, the crisis framework proposed by Narayan and Joslin (1980) lends itself more readily to the understanding of the family members' situation. In emphasizing the adequacy of existing coping mechanisms and focussing on the health component of intervention, it

would logically follow that if external resources such as intervention by health care personnel were adequate and needs were met, then a crisis for family members could be resolved. Intervention with family members on the part of the ICU nurse thus becomes focussed upon clarification and meeting of their special needs, either by direct intervention or referral to appropriate resources, in order to promote the well-being of family members during the stressful period of a critical illness.

CHAPTER VI

SUMMARY, CONCLUSIONS, IMPLICATIONS FOR NURSING AND RECOMMENDATIONS

In this chapter a summary of the study is given, major conclusions are drawn and implications for nursing practice, education, and administration are explored. Recommendations for future research on family members of ICU patients are also given.

Summary

A review of the literature revealed that family members of patients in intensive care units have special needs arising from the patients' uncertain prognosis as well as the family members' lack of familiarity with the intensive care environment. Although research studies have explored the needs experienced by family members of ICU patients, no studies compared family members' and ICU nurses' perceptions of family members' needs. A knowledge of the differences between these perceptions would assist in the planning of most appropriate interventions.

As a preliminary investigation of these perceptions, a study was conducted 1) to determine the relative importance of selected needs of family members as they are perceived by family members and ICU nurses; 2) to determine whether and by whom these needs are being met according to family members and ICU nurses; and 3) to determine the amount of agreement between family members' and nurses' perceptions regarding nursing's responsibility to meet family members' needs. A medical model of crisis (Caplan, 1964; Rapaport, 1962; and others) and a nursing model of crisis (Narayan & Joslin, 1980) provided the theoretical basis for the study.

A descriptive research design involving two independent samples of 40 family members and 31 nurses from the intensive care unit of a large metropolitan teaching hospital was used. Data were collected from family members following the patient's transfer out of the intensive care unit using a questionnaire containing 40 need statements developed by Molter (1976, 1972). A four point Likert-type scale measured the importance of needs as perceived by the subjects. Respondents indicated whether each need was met and whether it was a responsibility of nursing to meet the need. One open-ended question sought to identify additional needs experienced by family members as perceived by family members and nurses.

Descriptive statistics were used to analyze the results. Kendall's tau was utilized to measure the degree of association between the importance of needs and selected characteristics of the samples. Factor analysis was performed on the responses to the rating scale to identify major factors or components of needs that were being measured. In order to determine differences among various categories of respondents, a number of analyses of variance on factor scores were carried out.

Findings of this study were as follows:

(1) the needs considered important by the majority of family members related to receiving honest, understandable information about the patient's prognosis and medical treatment, and knowing that hospital personnel cared about the patient. The need to feel that there is hope was unanimously considered to be very important. Each need statement on the question-

naire was considered very important by at least one family member.

(2) The variables of age, sex and socioeconomic class did not appear to be associated with the relative importance of the needs for family members.

(3) The majority of family members considered that their needs were met. Exceptions to this were the need to talk to the doctor daily and the need to have a place to be alone while at the hospital.

(4) The majority of family members indicated that their needs were met by nurses. Other visitors contributed to meeting emotional support needs.

(5) Responses from ICU nurses demonstrated agreement with family members regarding those needs generally considered important to family members. Length of nursing experience did not appear to influence the relative importance of the needs.

(6) Family members and nurses were in general agreement regarding the responsibility of nursing to meet their needs. Two notable exceptions were the need to have someone to talk to about their feelings and the need to have someone concerned about their health. In both instances, a greater percentage of nurses than family members indicated it was a responsibility of nursing to meet these needs.

(7) Factor analysis on the questionnaire identified five major underlying components of family members' needs.

These were: needs related to information about the patient's treatment and prognosis; needs related to supportive people; needs regarding patient visiting; needs regarding information about the intensive care environment; and needs pertaining to the physical surroundings in the hospital. These categories explained 63.0% of the variance in nurse responses and 54.9% in family members' responses. Fifteen analyses of variance on these factor scores resulted in only two statistically significant differences, suggesting that the perception of needs by family members was not associated with the demographic variables studied.

(8) Family members in older age groups rated needs pertaining to the physical environment of the hospital as being more important than did those in younger age groups while younger family members tended to rate needs regarding information about the intensive care environment as being more important than did those in older age groups.

Conclusions

Conclusions drawn from this investigation are as follows:

(1) The needs considered important to family members in this study are similar to those considered important to family members in previous studies.

(2) The need to maintain hope appears to be of greatest importance to family members during the uncertainty of

a critical illness.

(3) Family members were able to identify whether the needs important to them were met. Such an awareness could be used to apply principles of crisis intervention (Burgess & Baldwin, 1981) on both individual and group bases.

(4) Although the majority of family members indicated that their needs were met by nurses, other resources, including other visitors, were helpful in meeting their needs.

(5) There was indication that ICU nurses were attuned to the needs experienced by family members of ICU patients and were aware of constraints imposed by time, workload and the physical setting of the intensive care environment.

(6) The nursing model of crisis proposed by Narayan and Joslin (1980) is helpful in understanding and articulating the needs experienced by family members of ICU patients.

Implications for Nursing

Limitations of the study design and sampling technique used restrict the immediate implications of the study for nursing. The main value of the study is heuristic, serving to direct the focus of further research on ICU patients' families. The present findings should be validated by further research before suggestions for nursing practice, education and administration are considered for implementation. The implications for nursing discussed below are considered in light of this.

Needs which were rated as being most important to family members in this study pertained to receiving honest and accurate infor-

mation regarding the patient's condition and treatment. In planning the care of the patient to include family members, the nurse may promote meeting the need for information by setting aside a particular time each day for nurse-family contact. The meeting would have the purpose of providing family members with information regarding the patient's condition and may also be helpful in providing needed emotional support. An atmosphere of hope and concern could be provided through a group process, such as in family support groups.

Although considered to be important to both family members and nurses in this study, the need to talk to the doctor daily was not met for the majority of the family members. While the duties of medical staff in an intensive care unit and involvement with emergency situations dictate that family members have limited access to doctors to answer their questions, nurses can be instrumental in arranging doctor-family meetings. In consultation with family members, a time could be set aside during the day for these contacts and noted on the patient's care plan.

Family members indicated that the need to visit the patient frequently was very important. Flexible visiting hours in the intensive care unit in the present study contributed to meeting this need. The length and timing of visits should be at the discretion of the nurse caring for the patient, and based upon accurate assessment of the patient and family members.

The development of tools for systematic assessment and care planning would allow the nurse to become more proficient in the recognition of family members' needs. These assessment tools should be included in nursing curricula. Discussion of family coping mechanisms

and response to illness should be incorporated to promote the development of family-focussed nursing care and accurate family assessment skills.

Recommendations

The importance of those needs commonly experienced by family members was explored in this study. Further research may also include a comparative study to determine if there are similarities or differences in the needs of family members as they are perceived by the nurse caring for specific patients in the intensive care unit and their family member(s).

Results indicated that the meeting of each need was considered by at least one family member to be a responsibility of nursing. The questionnaire however did not elicit information pertaining to whether the responsibility was shared by other health professionals. It would be interesting in future investigations to explore the perceptions of family members and various health professionals regarding this point; e.g., should some of the emotional needs identified as important in the present study be the responsibility of social workers and/or psychologists as well as nurses?

As this study was undertaken following the patients' transfer out of the intensive care unit, future research focussing on family members might be directed at comparing needs and their importance to family members as the patient in the intensive care unit passes from the critical phase of illness to a more stable phase. It is also recommended that further research include experimental studies to determine if specific interventions contribute to the family members' feeling that their needs were being met.

Although this investigation accomplished the overall objective of exploring family members' needs as they are perceived by family members and ICU nurses, further research is required to validate the present findings and to explore this relationship more fully. It is important that in any future research in which the perceptions of family members and nurses are compared, consideration be given to overcoming the limitations associated with this study. Based upon the results and experience of this investigator, the following specific recommendations are made:

(1) Respondents should be randomly selected and larger sample sizes be used in order to allow generalizability of the findings and increase the power of the results of statistical analyses.

(2) This study involved only family members of patients who were in the recuperative stage following transfer from the intensive care unit. Future research should also include family members of patients who had recently died in the intensive care unit to ascertain their needs.

(3) As additional needs were identified by respondents in the present study, refinements on the questionnaire are necessary before it exhaustively reflects the needs experienced by family members of ICU patients.

(4) The ranking of needs in this study was based on scores derived from respondents' rating of the importance of needs considered individually, rather than on respondents' own ranking of needs. In future research, the use of

a Q-sort method (Nunnally, 1959) for determining the relative importance of needs according to family members and ICU nurses could be explored.

(5) The cut-off percentage for needs having been met in the present study was fifty percent. In future research it is recommended that the percentage cut-off point be higher and determined by nursing unit personnel.

In light of the above recommendations, further research which supports the findings in this study could provide valuable ground work for the development of theory upon which interventions could be based to assist families during the critical illness of a member.

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APPENDIX A

LETTERS OF PERMISSION, CONSENT FORMS AND COVERING LETTER

THE UNIVERSITY OF ALBERTA

FACULTY OF NURSING

CLINICAL SCIENCES BUILDING
EDMONTON, CANADA T6G 2G3

June 4, 1982

Dr. G.D. Molnar
Chairman,
Department of Medicine
Clinical Sciences Building
University of Alberta
Edmonton, Alberta

Dear Dr. Molnar:

As part of the requirements for the Master of Nursing degree, I am conducting a study to explore the needs of family members of ICU patients as they are perceived by family members and ICU nurses. Dr. S. Stinson, Professor, Faculty of Nursing, is Chairman of my thesis committee.

I wish to seek approval from the Department of Medicine in conducting this study at University of Alberta Hospital. The study will also be reviewed by the Nursing Research and Scholarly Activities Committee and the Special Services and Research Committee at U.A.H.

Enclosed please find a copy of the research proposal. I hope the proposed study would be of benefit and interest to your department, and I look forward to your comments and suggestions.

Sincerely,

Margaret D. Prowse R.N.,BSc.N.
M.N. Candidate
Faculty of Nursing

THE UNIVERSITY OF ALBERTA

FACULTY OF NURSING

CLINICAL SCIENCES BUILDING
EDMONTON, CANADA T6G 2G3

June 4, 1982

Dr. O.G. Thurston
Acting Chairman,
Department of Surgery
Clinical Sciences Building
University of Alberta
Edmonton, Alberta

Dear Dr. Thurston:

As part of the requirements for the Master of Nursing degree, I am conducting a study to explore the needs of family members of ICU patients as they are perceived by family members and ICU nurses. Dr. S. Stinson, Professor, Faculty of Nursing, is Chairman of my thesis committee.

I wish to seek approval from the Department of Surgery in conducting this study at University of Alberta Hospital. The study will also be reviewed by the Nursing Research and Scholarly Activities Committee and the Special Services and Research Committee at UAH.

Enclosed please find a copy of the research proposal. I hope the proposed study would be of benefit and interest to your department, and I look forward to your comments and suggestions.

Sincerely,

Margaret D. Prowse RN.,BScN.
MN Candidate

RESEARCH CONSENT FORM

This is to certify that I,_____, have agreed to participate in a study being conducted by Margaret Prowse, a graduate student in nursing, on the needs of family members of ICU patients. It is my understanding that:

1) I will be answering a questionnaire regarding the needs I perceive family members of patients in the intensive care unit experience;
2) my participation in the study is voluntary and I may refuse to answer any question(s), or may withraw from the study at any time with no consequences;
3) all responses on the questionnaire will be anonymous;
4) I will be able to know the results of the study once it is completed.

Signature_____

Witness_____

Date_____

RESEARCH CONSENT FORM

This is to certify that I,_____, have agreed to participate in a study being conducted by Margaret Prowse, a graduate student in nursing, on the needs of family members of patients who have been in the intensive care unit. It is my understanding that:

1) I will be answering a questionnaire regarding the needs I experienced while my family member was in the intensive care unit;
2) my participation in the study is voluntary and I may refuse to answer any question(s), or may withdraw from the study at any time with no consequences;
3) all responses on the questionnaire will be anonymous;
4) I may not necessarily directly benefit from participating in the study.

Signature_____

Witness_____

Date_____

THE UNIVERSITY OF ALBERTA

FACULTY OF NURSING

CLINICAL SCIENCES BUILDING
EDMONTON, CANADA T6G 2G3

Dear Nurse:

I am a graduate student in the Faculty of Nursing at the University of Alberta and as part of the requirements for my program I am conducting a study to explore the needs of family members of ICU patients.

Your participation in this study would be greatly appreciated. Realizing that your time is limited, I am using a questionnaire which takes approximately thirty minutes to complete. All responses on the questionnaire will remain anonymous and will be used for research purposes only.

If you agree to participate in the study, you are asked to sign the enclosed consent form and have it witnessed by another staff member. Please leave your consent form in the envelope at the main desk in Station 68.

The completed questionnaire may be mailed to the researcher in the envelope provided, or may be left in the large envelope at the main desk in Station 68. Please return the questionnaire within one week.

Thank you in advance for your time and assistance. I will be happy to share the results of the study with you when it is completed.

Yours sincerely,

Margaret D. Prowse R.N.,BSc.N.
MN Candidate

APPENDIX B

RESEARCH QUESTIONNAIRES

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NEEDS OF FAMILY MEMBERS OF ICU PATIENTS

INSTRUCTIONS

On the following pages is a list of statements of needs* which you may have experienced while your relative/friend was in the intensive care unit.

1. Please read each statement carefully, and in the columns next to the statement, indicate if it was (1) not important at all to you, (2) slightly important to you, (3) important to you, or (4) very important to you.
2. In the next two columns please place a check mark to indicate whether or not you feel that the need was generally met, and by whom, according to the choices given. You may select more than one of the choices.
3. In the last column, indicate whether or not you feel it is the responsibility of nursing to meet that need.
4. On the lines provided, please write down any additional needs that you experienced which are not mentioned in the list.
5. Finally, please complete the information regarding your age, sex, relationship to the patient, and number of times you visited the intensive care unit.

Thank you for your participation in this study. Please mail your completed questionnaire in the envelope provided as soon as possible. If you have any questions or would like further information regarding this study please feel free to contact the researcher at the address below:

Ms. Margaret Prowse
M.N. Program
Faculty of Nursing
Clinical Sciences Building
University of Alberta
Edmonton, Alberta T6G 2G3

Phone: 432-2216

*Need statements obtained from Molter, N. The Identification of Needs of and Their Importance to Relatives of Critically Ill Patients. Unpublished Master's Thesis, Emory University, 1976.

STATEMENTS	IMPORTANCE OF NEED				WAS THE NEED GENERALLY MET?		BY WHOM?							DO YOU FEEL IT IS A RESPONSIBILITY OF NURSING TO MEET THE NEED?	
	Not Important	Slightly Important	Important	Very Important	YES	NO	OTHER	OTHER VISITOR	FRIEND	RELATIVE	DOCTOR	CHAPLAIN	NURSE	YES	NO
1. I needed to feel accepted by hospital personnel.															
2. I needed to have my questions answered honestly.															
3. I needed to be able to visit whenever I wanted.															
4. I needed to have a place to be alone while at the hospital.															
5. I needed to be told about people in the hospital who could help me.															
6. I needed to have a specific person at the hospital to call when I couldn't be there.															
7. I needed to be told about how my relative/friend was going to be treated medically.															
8. I needed to have a telephone nearby where I was waiting.															
9. I needed to have good food easily available to me while at the hospital.															
10. I needed to feel that hospital personnel cared about my relative/friend.															
11. I needed to have the waiting room near my relative/friend.															
12. I needed to be told exactly what was being done for my relative/friend.															
13. I needed to be alone.															
14. I needed to be told about chaplain services.															
15. I needed to feel that there was hope.															
16. I needed to know why things were being done for my relative/friend.															
17. I needed to be told about transfer plans when they were being made.															
18. I needed to have someone explain to me about the sounds and equipment in the intensive care unit before I visited the first time.															
19. I needed someone to talk to about the possibility that my relative/friend might die.															
20. I needed to talk to someone about my feelings.															
21. I needed direction from the staff as to what was expected of me while I was at my relative/friend's bedside.															
22. I needed to know about the various types of staff taking care of my relative friend.															

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	IMPORTANCE OF NEED				WAS THE NEED GENERALLY MET?		BY WHOM?								DO YOU FEEL IT IS A RESPONSIBILITY OF NURSING TO MEET THE NEED?	
	Not Important	Slightly Important	Important	Very Important	YES	NO	OTHER	OTHER VISITOR	FRIEND	RELATIVE	DOCTOR	CHAPLAIN	NURSE		YES	NO
23. I needed to see my relative/friend frequently.																
24. I needed to have specific facts concerning my relative/friend's progress.																
25. I needed to do some of the physical care for my relative/friend.																
26. I needed to have friends nearby for support.																
27. I needed to talk to the doctor at least once a day.																
28. I needed to have the bathroom near the waiting room.																
29. I needed to be reassured that it was all right to leave the hospital for a while.																
30. I needed to have explanations given in terms that I could understand.																
31. I needed reassurance that the best care possible was being given to my relative/friend.																
32. I needed to know what type of staff could give me certain kinds of information.																
33. I needed to have comfortable furniture in the waiting room.																
34. I needed to have someone concerned about my health.																
35. I needed to know my relative/friend's chances for becoming well.																
36. I needed to know that I would be called at home if there were any changes in my relative/friend's condition.																
37. I needed to talk to the same nurses every day about my relative/friend's condition.																
38. I needed someone to encourage me to cry.																
39. I needed to receive information about my relative/friend's condition at least once a day.																
40. I needed to have another person with me when I visited my relative/friend.																

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41. If there are any other needs that you had which were not mentioned in the previous statements please describe below.

42. Your age: 18-24__ 25-34__ 35-59__ 60+__

43. Your sex: Male__ Female__

44. Your relationship to patient:
Husband /Wife__ Brother/ Sister__
Parent ___ Other (please specify)_____

45. Your highest level of education _____

46. Your occupation_____

47. Approximately how many visits did you make to the intensive care unit?
Less than five ___ Five to ten ___ Greater than ten ___

THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY. PLEASE MAIL YOUR COMPLETED QUESTIONNAIRE IN THE ENVELOPE PROVIDED.

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NURSES' QUESTIONNAIRE

NEEDS OF FAMILY MEMBERS OF ICU PATIENTS

INSTRUCTIONS

On the following pages is a list of statements of needs which family members* of ICU patients** experience.

1. Please read each statement carefully and, in the adjacent columns, indicate whether you feel it is (1) not important at all to family members, (2) slightly important to family members, (3) important to family members, or (4) very important to family members.
2. Please place a check mark in the appropriate column to indicate whether or not you feel that the need is generally met.
3. In the last column, indicate whether or not you feel it is the responsibility of nursing to meet the need.
4. On the lines provided please write down any additional needs that you feel family members may experience which are not mentioned in the list.
5. Finally, please complete the information regarding your age, sex, nursing education and nursing experience.

Thank you for your participation in this study. Please leave your completed questionnaire in the envelope provided, or leave it in the large envelope at the main desk in Station 68. If you have any questions or would like further information regarding this study please feel free to contact the researcher at the address below:

Ms. Margaret Prowse
M.N. Program
Faculty of Nursing
Clinical Sciences Building
University of Alberta
Edmonton, Alberta T6G 2G3

Phone: 432-2216

*Family member is defined as a person eighteen years of age or older related to or living with the patient, and who visited the patient at least three times while in the intensive care unit.

**ICU patients are those eighteen years of age or older who have spent between three and thirty days in the intensive care unit.

STATEMENTS	IMPORTANCE OF NEED				DO YOU FEEL THE NEED IS GENERALLY MET?		DO YOU FEEL IT IS A RESPONSIBILITY OF NURSING TO MEET THE NEED?	
	Not Important	Slightly Important	Important	Very Important	YES	NO	YES	NO
1. They need to feel accepted by hospital personnel.								
2. They need to have their questions answered honestly.								
3. They need to be able to visit whenever they want.								
4. They need to have a place to be alone while at the hospital.								
5. They need to be told about people in the hospital who could help them.								
6. They need to have a specific person at the hospital to call when they cannot be there.								
7. They need to be told about how their family member is going to be treated medically.								
8. They need to have a telephone nearby where they are waiting.								
9. They need to have good food easily available to them while at the hospital.								
10. They need to feel that hospital personnel care about their family member.								
11. They need to have the waiting room near the family member.								
12. They need to be told exactly what is being done for their family member.								
13. They need to be alone.								
14. They need to be told about chaplain services.								
15. They need to feel that there is hope.								
16. They need to know why things are being done for their family member.								
17. They need to be told about transfer plans when they are being made.								
18. They need to have someone explain the sounds and equipment in the intensive care unit before they visit for the first time.								
19. They need someone to talk to about the possibility that their family member might die.								
20. They need to talk to someone about their feelings.								
21. They need direction from the staff as to what is expected of them when they are at their family member's bedside.								

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	IMPORTANCE OF NEED				DO YOU FEEL THE NEED IS GENERALLY MET?		DO YOU FEEL IT IS A RESPONSIBILITY OF NURSING TO MEET THE NEED?	
	Not Important	Slightly Important	Important	Very Important	YES	NO	YES	NO
22. They need to know about the various types of staff taking care of their family member.								
23. They need to see their family member frequently.								
24. They need to have specific facts concerning their family member's progress.								
25. They need to do some of the physical care for their family member.								
26. They need to have friends nearby for support.								
27. They need to talk to the doctor at least once a day.								
28. They need to have a bathroom near the waiting room.								
29. They need to be reassured that it is all right to leave the hospital for a while.								
30. They need to have explanations given in terms that they can understand.								
31. They need to have reassurance that the best possible care is being given to their family member.								
32. They need to know what type of staff can give them certain kinds of information.								
33. They need to have comfortable furniture in the waiting room.								
34. They need to have someone concerned about their health.								
35. They need to know their family member's chances of becoming well.								
36. They need to know that they would be called at home if there were any changes in their family member's condition.								
37. They need to talk to the same nurses every day about their family member's condition.								
38. They need someone to encourage them to cry.								
39. They need to receive information about their family member's condition at least once a day.								
40. They need to have another person with them while they visit their family member at the bedside.								

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41. Are there any other needs that you feel family members experience which were not mentioned in the previous statements? If so, please describe below.

_____

_____

_____

42. Age: 18-24___ 25-34___ 35-59___ 43. Sex: M___ F___

44. Nursing Education:

___RN Diploma Grad. Hospital or Community College

___RN Basic degree

___ RN Post-basic degree

___Other (Please specify e.g: Master's degree, nursing specialty courses)_____

45. How long have you been in critical care nursing? ___years ___months

46. Number of years of overall nursing experience: ___years ___months

47. Are you currently employed part-time or full time? ___part-time ___full time

_____

THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY. PLEASE MAIL YOUR COMPLETED QUESTIONNAIRE IN THE ENVELOPE PROVIDED, OR LEAVE IT IN THE LARGE ENVELOPE AT THE MAIN DESK IN STATION 68.

_____

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APPENDIX C

TABLES

TABLE 18

RANKING OF NEEDS FROM MOST IMPORTANT TO LEAST IMPORTANT BY FREQUENCY OF RESPONSES FROM FAMILY MEMBERS (n=40)

Need	Categories of Importance			
	Not Important	Slightly Important	Important	Very Important
1. To feel that there is hope.				40
2. To know that they would be called at home if there were any changes in the patient's condition.			1	39
3. To have their questions answered honestly.			3	37
4. To know the patient's chances of becoming well.			4	36
5. To feel that hospital personnel care about the patient.		1	4	35
6. To have reassurance that the best possible care is being given to the patient.			7	33
7. To see the patient frequenty.	1		4	35
8. To be told exactly what is being done for the patient.			9	31
9. To receive information about the patient's condition at least once a day.		1	6	33

TABLE 18 (Continued)

Need	Categories of Importance			
	Not Important	Slightly Important	Important	Very Important
10. To have explanations given in terms that they can understand.		1	7	32
11. To be told how the patient is going to be treated medically.		1	13	26
12. To know why things are being done for the patient.			15	25
13. To have someone explain the sounds and equipment in the intensive care unit before they visit for the first time.	1		16	23
14. To talk to the doctor at least once a day.	2		15	23
15. To be told about transfer plans when they are being made.	1		17	22
16. To be able to visit whenever they want.	1	2	16	21
17. To have specific facts concerning the patient's progress.	2	1	15	22
18. To have a specific person at the hospital to call when they cannot be there.	3	2	12	23

TABLE 18(Continued)

Need	Categories of Importance			
	Not Important	Slightly Important	Important	Very Important
19. To feel accepted by hospital personnel.		4	22	14
20. To have someone to talk to about the possibility that the patient might die.	2	5	14	19
21. To have comfortable furniture in the waiting room.	3	1	23	13
22. To be reassured that it is all right to leave the hospital for a while.	5	4	12	19
23. To know about the various types of staff taking care of the patient.	2	4	21	13
24. To know what type of staff can give them certain kinds of information.	1	3	32	4
25. To have the waiting room near the patient.	6	4	21	9
26. To have a place to be alone while at the hospital.	8	1	21	10
27. To have friends nearby for support.	3	7	26	4

TABLE 18 (Continued)

Need	Categories of Importance			
	Not Important	Slightly Important	Important	Very Important
28. To have direction from the staff as to what is expected of them while at the patient's bedside.	5	9	19	7
29. To be told about people in the hospital who could help them.	4	12	21	3
30. To talk to someone about their feelings.	9	10	14	7
31. To do some of the physical care for the patient.	17	4	13	6
32. To talk to the same nurses every day about the patient's condition.	12	13	12	3
33. To have another person with them while they visit the patient at the bedside.	16	4	18	2
34. To have a telephone nearby where they are waiting.	8	22	7	3
35. To have good food available to them while at the hospital.	12	15	10	3
36. To be alone.	19	8	8	5

TABLE 18 (Continued)

Need	Categories of Importance			
	Not Important	Slightly Important	Important	Very Important
37. To have a bathroom near the waiting room.	22	10	4	4
38. To be told about chaplain services.	26	9	3	2
39. To have someone concerned about their health.	25	12	2	1
40. To have someone encourage them to cry.	38		1	1

TABLE 19

RANKING OF NEEDS FROM MOST IMPORTANT TO LEAST IMPORTANT BY FREQUENCY OF RESPONSES FROM ICU NURSES (n=31)

Need	Categories of Importance			
	Not Important	Slightly Important	Important	Very Important
1. To have their questions answered honestly.			2	29
2. To feel that hospital personnel care about the patient.			4	27
3. To have explanations given in terms that they can understand.			9	22
4. To know that they would be called at home if there were any changes in the patient's condition.			10	21
5. To talk to someone about the possibility that the patient might die.			12	19
6. To be told how the patient is going to be treated medically.		2	10	19
7. To know why things are being done for the patient.		3	10	18
8. To have reassurance that the best possible care is being given to the patient.			14	17
9. To receive information about the patient's condition at least once a day.		1	13	17

TABLE 19 (Continued)

Need	Categories of Importance			
	Not Important	Slightly Important	Important	Very Important
10. To talk to someone about their feelings.		3	10	18
11. To know the patient's chance of becoming well.			16	15
12. To feel that there is hope.			16	15
13. To have someone explain the sound and equipment in the intensive care unit before they visit for the first time.		1	14	16
14. To be told exactly what is being done for the patient.		2	14	15
15. To have a place to be alone while at the hospital.		2	16	13
16. To be told about people in the hospital who could help them.		3	15	13
17. To have specific facts concerning the patient's progress.		4	14	13
18. To be reassured that it is all right to leave the hospital for a while.		7	8	16
19. To see the patient frequently.		1	21	9

TABLE 19(Continued)

Need	Categories of Importance			
	Not Important	Slightly Important	Important	Very Important
20. To have the waiting room near the patient.	2	2	13	14
21. To have a telephone nearby where they are waiting.		7	10	14
22. To be told about transfer plans when they are being made.		5	14	12
23. To be alone.	2	4	14	11
24. To talk to the doctor at least once a day.	3	3	14	11
25. To have friends nearby for support.	2	2	19	8
26. To feel accepted by hospital personnel.		4	21	6
27. To have direction from the staff as to what is expected of them when they are at the patient's bedside.	1	7	14	9
28. To know about the various types of staff taking care of the patient.	1	5	18	7
29. To know what type of staff can give them certain kinds of information.	2	5	18	6
30. To be told about chaplain services.		7	20	4

TABLE 19 (Continued)

Need	Categories of Importance			
	Not Important	Slightly Important	Important	Very Important
31. To have comfortable furniture in the waiting room.		13	11	7
32. To be able to visit whenever they want.	1	8	19	3
33. To have someone concerned about their health.	2	6	21	2
34. To have a bathroom near the waiting room.	4	7	14	6
35. To have someone encourage them to cry.	2	14	12	3
36. To have good food easily available to them while at the hospital.	6	10	11	4
37. To do some of the physical care for the patient.	2	16	12	1
38. To have a specific person at the hospital to call when they cannot be there.	13	7	9	2
39. To talk to the same nurses every day about the patient's condition.	12	8	11	
40. To have another person with them while they visit the patient.	12	13	6	

TABLE 20

FREQUENCY OF RESPONSES FROM FAMILY MEMBERS IN RELATION TO WHO MET THE NEEDS

Need	Categories[a]						
	Nurse	Chaplain	Doctor	Relative	Friend	Other Visitor	Other
1. To feel accepted by hospital personnel.	40	2	15				
2. To have their questions answered honestly.	38		29				
3. To be able to visit whenever they want.	31						
4. To have a place to be alone while at the hospital.							7
5. To be told about people in the hospital who could help them.	32		3			3	
6. To have a specific person at the hospital to call when they cannot be there.	36						
7. To be told about how their family member is going to be treated medically.	29		34				

TABLE 20(Continued)

Need	Categories[a]						
	Nurse	Chaplain	Doctor	Relative	Friend	Other Visitor	Other
8. To have a telephone nearby where they are waiting.							38
9. To have good food easily available to them while at the hospital.							34
10. To feel that hospital personnel care about their family member.	38	4	21				
11. To have the waiting room near the family member.							39
12. To be told exactly what is being done for their family member.	38		19				
13. To be alone.							
14. To be told about chaplain services.	18	3					
15. To feel that there is hope.	38	7	33	2	5	3	2

TABLE 20(Continued)

Need	Categories[a]						
	Nurse	Chaplain	Doctor	Relative	Friend	Other Visitor	Other
16. To know why things are being done for their family member.	37		19				
17. To be told about transfer plans when they are being made.	36		2				
18. To have someone explain the sounds and equipment in the intensive care unit before they visit for the first time.	27						
19. To have someone to talk to about the possibility that their family member might die.	20	3	21	5			
20. To talk to someone about their feelings.	10	3		18	15	4	
21. To have direction from the staff as to what is expected of them when they are at their family member's bedside.	32						

TABLE 20(Continued)

Need	Categories[a]						
	Nurse	Chaplain	Doctor	Relative	Friend	Other Visitor	Other
22. To know about the various types of staff taking care of their family member.	35		4				
23. To see their family member frequently.	30						19
24. To have specific facts concerning their family member's progress.	29		27				
25. To be involved with the physical care of the family member.	12						
26. To have friends nearby for support.				5	31		
27. To talk to the doctor at least once a day.			8				
28. To have a bathroom near the waiting room.							39

TABLE 20(Continued)

Need	Categories[a]						
	Nurse	Chaplain	Doctor	Relative	Friend	Other Visitor	Other
29. To be reassured that it is all right to leave the hospital for a while.	36		3				
30. To have explanations given in terms that they can understand.	38		24				
31. To have reassurance that the best possible care is being given to their family member.	34	3	19	18	22	19	
32. To know what type of staff can given them certain kinds of information.	33		3			7	
33. To have comfortable furniture in the waiting room.							4
34. To have someone concerned about their health.	2			22	18		
35. To know their family member's chances of becoming well.	24		30				

TABLE 20(Continued)

Need	Categories[a]						
	Nurse	Chaplain	Doctor	Relative	Friend	Other Visitor	Other
36. To know that they would be called at home if there were any changes in their family member's condition.	35						
37. To talk to the same nurses every day about their family member's condition.	11						
38. To have someone to encourage them to cry.	1			3	2		
39. To receive information about their family members' condition at least once a day.	35		3				
40. To have another person with them while they visit their family member at the bedside.	3			21			

[a]Numbers in each column depict absolute frequencies.